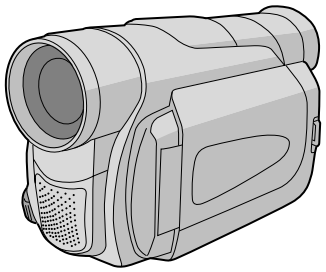
JVC

# SERVICE MANUAL

## DIGITAL VIDEO CAMERA

# GR-D70A$_{A}$,GR-D70A$_{G}$,GR-D70A$_{S}$,GR-D90A$_{G}$



Mini DV PAL

DSC DIGITAL STILL CAMERA

For disassembling and assembling of MECHANISM ASSEMBLY, refer to the SERVICE MANUAL No.86700 (MECHANISM ASSEMBLY).

**Regarding service information other than these sections, refer to the service manual No. 86733 (GR-D70EK).**
**Also, be sure to note important safety precautions provided in the service manual.**

## SPECIFICATION *(The specifications shown pertain specifically to the model GR-D90,D70)*

### Camcorder

#### General

| | |
|---|---|
| **Power supply** | : DC 11.0 V ⎓ (Using AC Adapter)<br>DC 7.2 V ⎓ (Using battery pack) |
| **Power consumption** | |
| **LCD monitor off, viewfinder on** | : Approx. 3.4 W |
| **LCD monitor on, viewfinder off** | : Approx. 4.7 W |
| **Dimensions (W x H x D)** | : 69 mm x 94 mm x 143 mm<br>(with the LCD monitor closed and the viewfinder pushed back in) |
| **Weight** | : Approx. 525 g |
| **Operating temperature** | : 0°C to 40°C |
| **Operating humidity** | : 35% to 80% |
| **Storage temperature** | : –20°C to 50°C |
| **Pickup** | : 1/6" CCD |
| **Lens** | : F 1.6 – 2.4, f = 2.7 mm to 43.2 mm, 16:1 power zoom lens |
| **Filter diameter** | : ø37 mm |
| **LCD monitor** | : 3.5" diagonally measured, LCD panel/TFT active matrix system (GR-D90)<br>2.5" diagonally measured, LCD panel/TFT active matrix system (GR-D70) |
| **Viewfinder** | : Electronic viewfinder with 0.24" black/white LCD |
| **Speaker** | : Monaural |

#### Digital Video Camera

| | |
|---|---|
| **Format** | : DV format (SD mode) |
| **Signal format** | : PAL standard |
| **Recording/Playback format** | : Video: Digital component recording<br>: Audio: PCM digital recording, 32 kHz 4-channel (12-bit), 48 kHz 2-channel (16-bit) |
| **Cassette** | : Mini DV cassette |
| **Tape speed** | : SP : 18.8 mm/s<br>LP : 12.5 mm/s |
| **Maximum recording time (using 80 min. cassette)** | : SP : 80 min.<br>LP : 120 min. |

#### Digital Still Camera Function

| | |
|---|---|
| **Storage media** | : SD Memory Card/MultiMediaCard |
| **Compression system** | : JPEG (compatible) |
| **File size** | : 2 modes (1024 x 768 pixels, 640 x 480 pixels) |
| **Picture quality** | : 2 modes (FINE/STANDARD) |
| **Approximate number of storable images** | : ☞ pg. 18. |

#### Connectors

| | |
|---|---|
| **S-Video** | |
| **Output** | : Y : 1 V (p-p), 75 Ω, analogue<br>C : 0.29 V (p-p), 75 Ω, analogue |
| **Input** | : Y : 0.8 V (p-p) – 1.2 V (p-p), 75 Ω, analogue<br>C : 0.2 V (p-p) – 0.4 V (p-p), 75 Ω, analogue |
| **AV** | |
| **Video output** | : 1 V (p-p), 75 Ω, analogue |
| **Video input** | : 0.8 V (p-p) – 1.2 V (p-p), 75 Ω, analogue |
| **Audio output** | : 300 mV (rms), 1 kΩ, analogue, stereo |
| **Audio input** | : 300 mV (rms), 50 kΩ, analogue, stereo |
| **DV** | |
| **Output** | : 4-pin, IEEE 1394 compliant |
| **Input** | : 4-pin, IEEE 1394 compliant |
| **USB** | : 5-pin |
| **EDIT** | : ø3.5 mm, 2-pole |

### AC Adapter

| | |
|---|---|
| **Power requirement** | : AC 110 V — 240 V ∿, 50 Hz/60 Hz |
| **Output** | : DC 11 V ⎓, 1 A |

**Optional Accessories**

**• Battery Packs BN-V416U, BN-V428U**

Specifications shown are for SP mode unless otherwise indicated. E & O.E.
Design and specifications subject to change without notice.

GR-D70AA,GR-D70AG,GR-D70AS,GR-D90AG M3D127,M3D147

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**No. 86743**
**2003/05**

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# DIFFERENT LIST

## DIFFERENT TABLE OF FEATURE

**The following table indicate main different points between models GR-D70EX, GR-D70AA, GR-D70AG, GR-D70AS and GR-D90AG.**

| ITEM \ MODEL | GR-D70EX | GR-D70AA | GR-D70AG | GR-D70AS | GR-D90AG |
|---|---|---|---|---|---|
| LCD MONITOR | 2.5" | ← | ← | ← | 3.5" |
| AC ADAPTER | AP-V11E or AP-V13E | ← | AP-V13A or AP-V11E or AP-V13E | AP-V13A | AP-V13A or AP-V11E or AP-V13E |
| AC CORD | CEE PLUG | AS/NZS PLUG | CEE PLUG | SASO PLUG | CEE PLUG |

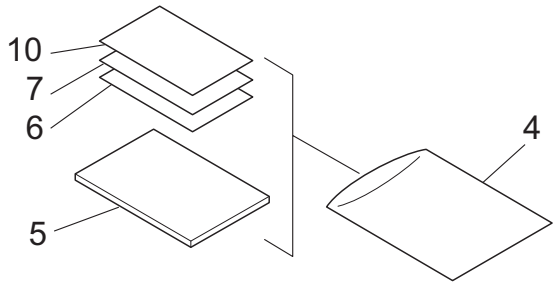
## DIFFERENT TABLE OF PARTS LIST

**The following table indicate different parts number between models GR-D70EX, GR-D70AA, GR-D70AG, GR-D70AS and GR-D90AG.**

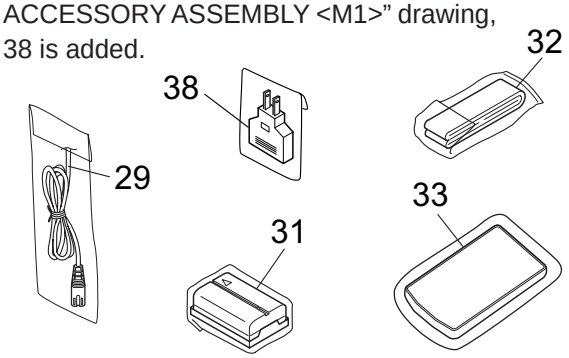
**PACKING AND ACCESSORY ASSEMBLY <M1>**

| ⚠ REF. NO. | ITEM \ MODEL | GR-D70EX | GR-D70AA | GR-D70AG | GR-D70AS | GR-D90AG |
|---|---|---|---|---|---|---|
| 1 | PACKING CASE | LY33063-013A | *LY33063-013B | *← | *← | LY33063-004A |
| ⚠ 5 | INST BOOK(ENGLISH) | — | LYT1125-001A | ← | ← | ← |
| ⚠ 5 | INST BOOK(GERMAN) | LYT1145-002A | — | LYT1125-005A | ← | ← |
| ⚠ 5 | INST BOOK(FRENCH) | LYT1145-003A | — | LYT1125-006A | ← | ← |
| ⚠ 5 | INST BOOK(DUTCH) | LYT1145-004A | — | — | — | — |
| ⚠ 5 | INST BOOK(SPANISH) | LYT1145-005A | — | — | — | — |
| ⚠ 5 | INST BOOK(ITALIAN) | LYT1145-006A | — | — | — | — |
| ⚠ 5 | INST BOOK(CHINESE) | — | — | LYT1125-002A | ← | ← |
| ⚠ 5 | INST BOOK(RUSSIAN) | — | — | LYT1125-003A | ← | ← |
| ⚠ 5 | INST BOOK(ARABIC) | — | — | LYT1125-004A | ← | ← |
| 6 | INST BOOK(SOFT.ENGLISH) | — | LYT1085-001A | ← | ← | ← |
| 6 | INST BOOK(SOFT.GERMAN) | LYT1085-002A | — | LYT1085-002A | ← | ← |
| 6 | INST BOOK(SOFT.FRENCH) | LYT1085-003A | — | LYT1085-003A | ← | ← |
| 6 | INST BOOK(SOFT.DUTCH) | LYT1085-004A | — | — | — | — |
| 6 | INST BOOK(SOFT.SPANISH) | LYT1085-005A | — | — | — | — |
| 6 | INST BOOK(SOFT.ITALIAN) | LYT1085-006A | — | — | — | — |
| 6 | INST BOOK(SOFT.CHINESE) | — | — | LYT1085-015A | ← | ← |
| 6 | INST BOOK(SOFT.RUSSIAN) | — | — | LYT1085-011A | ← | ← |
| 7 | WARRANTY CARD | BT-54013-5 | BT-56012-1 | — | — | — |
| 10 | SHEET(CON.PLUG) | — | — | LYT0609-001A | ← | ← |
| ⚠ 27 | AC ADAPTER | LY20955-001C | ← | ← | — | LY20955-001C |
| ⚠ 27 | AC ADAPTER | LY20956-001B | ← | ← | — | LY20955-001B |
| ⚠ 27 | AC ADAPTER | — | — | LY20955-002B | ← | ← |
| ⚠ 29 | POWER CORD | QMPL120-190-JR | QMPH020-190-JR | QMPL120-190-JR | QMPS110-190-JR | QMPL120-190-JR |
| ⚠ 38 | CONVERSION PLUG | — | — | PEMC1012-02 | PEMC1012 | PEMC1012-02 |
| 41 | ADAPTOR PLUG | QAM0302-001 | — | — | — | — |

As for the difference in a "PACKING AND ACCESSORY ASSEMBLY <M1>" drawing, 10 is added.




As for the difference in a "PACKING AND ACCESSORY ASSEMBLY <M1>" drawing, 38 is added.




Notes : Mark — is not used.
Mark ← is same as left.
Mark * reference model was also changed.

## FINAL ASSEMBLY <M2>

| ⚠ REF. NO. | ITEM / MODEL | GR-D70EX | GR-D70AA | GR-D70AG | GR-D70AS | GR-D90AG |
|---|---|---|---|---|---|---|
| 101 | U.CASE(2.5)ASSY/U.CASE(3.5)ASSY | LY20941-004M | ← | LY20941-004H | ← | LY20942-002F |
| 101F | SPACER(A) | LY30030-0F2A | ← | ← | ← | — |
| 103 | BKT(HINGE2.5)/BKT(HINGE3.5) | LY33044-001D | ← | ← | ← | LY33054-001C |
| 109 | COVER(UPPER2.5)/COVER(UPPER3.5) | LY33049-002A | ← | ← | ← | LY33055-002A |
| 115 | ORNAMENT(2.5)/ORNAMENT(3.5) | LY33009-001A | ← | ← | ← | LY33361-003B |
| 123 | STICKER(2)/STICKER(3) | LY44187-003A | ← | ← | ← | LY44188-002A |
| 135 | F.COVER ASSY | LY20943-002E | ← | LY20943-002D | LY20943-002E | LY20943-002D |
| 162 | SPECIAL SCREW | LY30018-0E6A | *LY30018-059A | *← | *← | *← |
| 203 | FFC | QAL0465-001 | ← | ← | ← | — |
| 259 | SPACER(A) | LY30029-0Q7A | ← | — | LY30029-0Q7A | — |

## MONITOR ASSEMBLY <M5>

| ⚠ REF. NO. | ITEM / MODEL | GR-D70EX | GR-D70AA | GR-D70AG | GR-D70AS | GR-D90AG |
|---|---|---|---|---|---|---|
| ⚠ 500 | MONITOR ASSY | LY21042-005B | ← | ← | ← | LY21042-006B |
| ⚠ 501 | M.COVER(2.5)ASSY/M.COVER(3.5)ASSY | LY20932-004E | ← | ← | ← | LY20933-002B |
| 501A | KNOB(LOCK)M/KNOB(LOCK 1) | LY33007-001C | ← | ← | ← | LY31620-006A |
| 501B | HOLDER(LOCK)M/KNOB(LOCK 2) | LY33008-001A | ← | ← | ← | LY42180-003A |
| 501C | COMPRES.SPRING | LY30002-047A | ← | ← | ← | LY30002-044A |
| 501D | SPECIAL SCREW,X2 | LY30018-0C8A | ← | ← | ← | LY30018-084A |
| 501E | SPACER(A) | LY30030-0E5A | ← | ← | ← | — |
| 502 | MONI.CASE(2.5)/MONI.CASE(3.5) | LY10407-001C | ← | ← | ← | LY10409-001A |
| 504 | SPECIAL SCREW,X2 | LY30018-0K9A | ← | ← | ← | LY30018-0F2A |
| 505 | BACK LIGHT | — | — | — | — | QLL0141-001 |
| 506 | LCD FRAME(2.5)/LCD FRAME(3.5) | LY33011-001C | ← | ← | ← | LY32335-001A |
| 507 | LCD MODULE | QLD0262-001 | ← | ← | ← | QLD0263-001 |
| 509 | SPACER(A) | — | — | — | — | LY30030-048A |
| 510 | SHIELD CASE(2.5)/S.CASE(3.5)ASSY | LY33010-001A | ← | ← | ← | LY44217-001A |
| 510A | SPACER(A) | — | — | — | — | LY30030-081A |
| 511 | SPACER(A),X2 | — | — | — | — | LY30030-049A |
| 513 | DIFF.SHEET(2.5) | LY33012-001A | ← | ← | ← | — |
| 514 | LIGHT SCREEN | LY43938-001A | ← | ← | ← | — |
| 515 | MONI.HINGE ASSY | LY33013-003B | ← | ← | ← | LY33013-004B |
| 515A | HINGE COVER(U) | LY33015-002A | ← | ← | ← | LY32968-001A |
| 516 | HOLDER(LAMP),X2 | LY43936-001A | ← | ← | ← | — |
| 517 | SHEET(REFLECT) | LY43396-001A | ← | ← | ← | — |
| 518 | LAMP | QLL0142-001 | ← | ← | ← | — |
| 519 | SPACER(A) | — | — | — | — | LY30030-0F5B |

## ELECTRONIC VIEWFINDER ASSEMBLY <M4>

| ⚠ REF. NO. | ITEM / MODEL | GR-D70EX | GR-D70AA | GR-D70AG | GR-D70AS | GR-D90AG |
|---|---|---|---|---|---|---|
| 318A | TOR.SPRING | LY43962-001C | *LY43962-001E | *← | *← | *← |

## MAIN BOARD ASSEMBLY <01>

| ⚠ REF. NO. | ITEM / MODEL | GR-D70EX | GR-D70AA | GR-D70AG | GR-D70AS | GR-D90AG |
|---|---|---|---|---|---|---|
| IC8003 | IC(MICRO C ROM) | MBV160TE90PTA48 | *MBV160TE90PTA51 | *← | *← | *← |
| R1041 | MG RESISTOR | NRSA6AJ-0R0W | *— | *— | *— | *— |
| R1042 | MG RESISTOR | NRSA6AJ-0R0W | *— | *— | *— | *— |

## MONI-BW BOARD ASSEMBLY <02>

| ⚠ REF. NO. | ITEM / MODEL | GR-D70EX | GR-D70AA | GR-D70AG | GR-D70AS | GR-D90AG |
|---|---|---|---|---|---|---|
| PW1 | MONI-BW BOARD ASSY | YB10433F-01 | YB10433F-02 | FB10433F-01 | ← | YB10433G-01 |
| R7603 | MG RESISTOR | NRSA63J-683X | ← | ← | ← | — |
| R7619 | CMF RESISTOR | — | — | — | — | NRVA63D-153X |
| R7639 | CMF RESISTOR | — | — | — | — | NRVA63D-183X |
| CN763 | CONNECTOR | QGF0507F3-20X | ← | ← | ← | — |
| CN764 | CONNECTOR | — | — | — | — | QGF0503C1-20X |
| SW7601 | LEVER SWITCH | NSW0200-001X | ← | ← | ← | — |
| SW7602 | LEVER SWITCH | — | — | — | — | NSW0200-001X |

## BL-3.5 BOARD ASSEMBLY <03>

| ⚠ REF. NO. | ITEM / MODEL | GR-D70EX | GR-D70AA | GR-D70AG | GR-D70AS | GR-D90AG |
|---|---|---|---|---|---|---|
| PW1 | BL-2.5/BL-3.5 BOARD ASSY | YB20938A | ← | ← | ← | YB20939A |

Notes : Mark — is not used.
Mark ← is same as left.
Mark * reference model was also changed.

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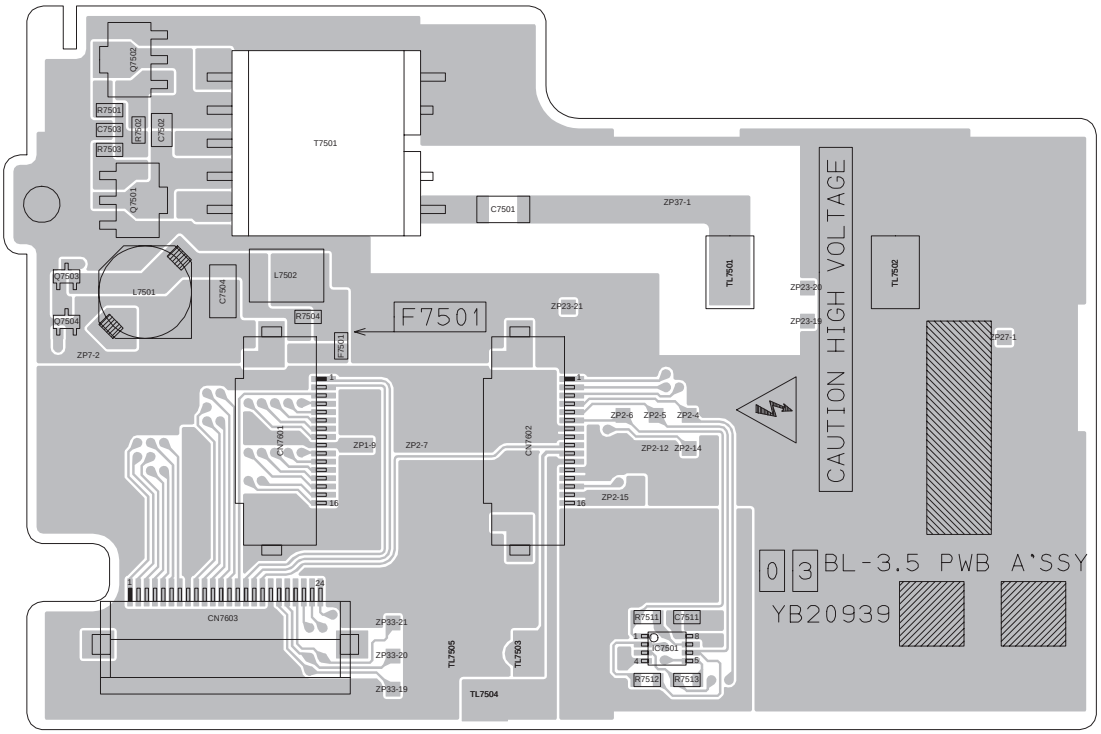
(No.86743)

Printed in Japan
200305VP

# CHARTS AND DIAGRAMS

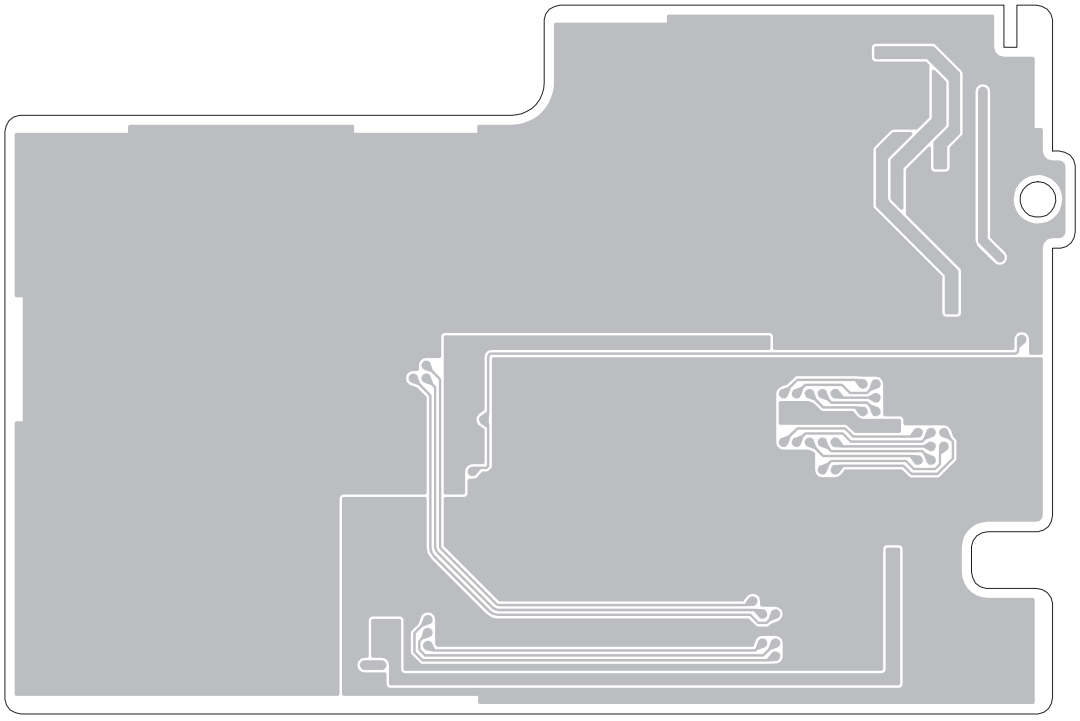
## ■ BL-3.5 CIRCUIT BOARD [GR-D90AG]

### COMPONENT SIDE(A)




**<03> BL-3.5**
**YB 20939**

### FOIL SIDE (B)



**<03> BL-3.5**
**YB 20939**

# PARTS LIST

## SAFETY PRECAUTION

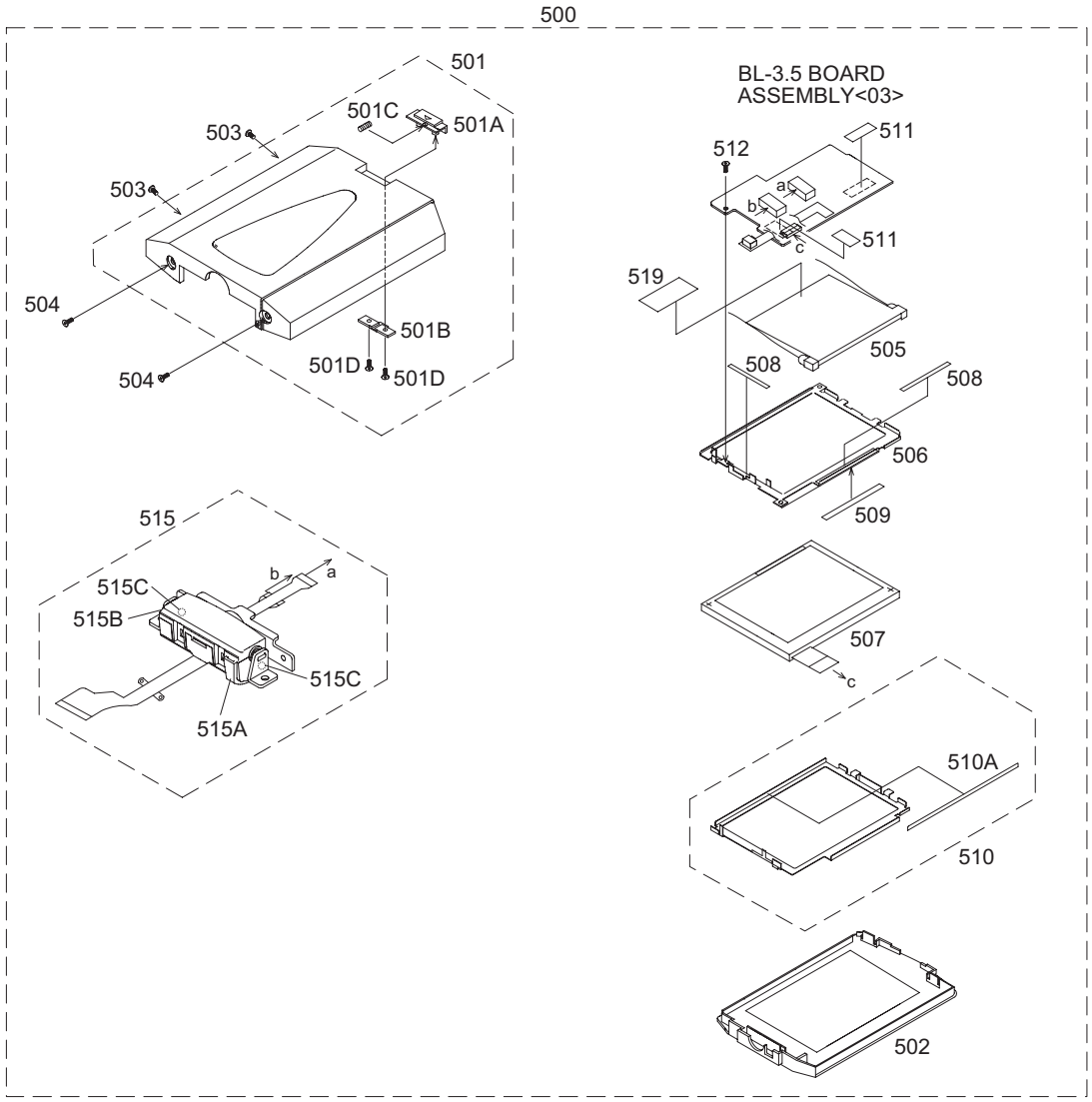
**Parts identified by the ⚠ symbol are critical for safety. Replace only with specified part numbers.**

## BEWARE OF BOGUS PARTS

**Parts that do not meet specifications may cause trouble in regard to safety and performance. We recommend that genuine JVC parts be used.**

### 1. EXPLODED VIEW

#### 1.1 MONITOR ASSEMBLY (3.5 INCH) <M5>[GR-D90AG]




### 2. PARTS LIST

#### MONITOR ASSEMBLY(3.5INCH)<M5>[GR-D90AG]

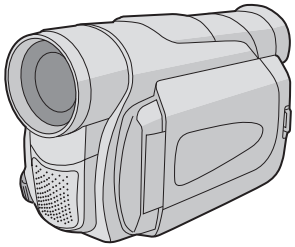
| ⚠ | Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|---|
| ⚠ | 500 | LY21042-006B | MONITOR ASSY | | |
| ⚠ | 501 | LY20933-002B | M.COVER(3.5)ASSY | | |
| | 501A | LY31620-006A | KNOB(LOCK 1) | | |
| | 501B | LY42180-003A | KNOB(LOCK 2) | | |
| | 501C | LY30002-044A | COMPRES. SPRING | | |
| | 501D | LY30018-084A | SPECIAL SCREW | (x2) | |
| | 502 | LY10409-001A | MONI.CASE(3.5) | | |
| | 503 | QYSPSPT1730R | SCREW | 1.7mm x 3mm(x2) | |
| | 504 | LY30018-0F2A | SPECIAL SCREW | (x2) | |
| | 505 | QLL0141-001 | BACK LIGHT | | |
| | 506 | LY32335-001A | LCD FRAME(3.5) | | |
| | 507 | QLD0263-001 | LCD MODULE | | |
| | 508 | LY30029-0R5A | SPACER(A) | (x2) | |
| | 509 | LY30030-048A | SPACER(A) | | |
| | 510 | LY44217-001A | S.CASE(3.5)ASSY | | |
| | 510A | LY30030-081A | SPACER(A) | | |
| | 511 | LY30030-049A | SPACER(A) | (x2) | |
| | 512 | QYSPSPT1720R | SCREW | 1.7mm x 2mm | |
| | 515 | LY33013-004B | MONI.HINGE ASSY | | |
| | 515A | LY32968-001A | HINGE COVER(U) | | |
| | 515B | LY32969-002A | HINGE COVER(L) | | |
| | 515C | LY30018-0K1A | SPECIAL SCREW | (x2) | |
| | 519 | LY30030-0F5B | SPACER(A) | | |

JVC

# SERVICE MANUAL

## DIGITAL VIDEO CAMERA

# GR-D70EK,GR-D70Ex, GR-D70EY,GR-D70EZ



Mini DV PAL

DSC DIGITAL STILL CAMERA

For disassembling and assembling of MECHANISM ASSEMBLY, refer to the SERVICE MANUAL No.86700 (MECHANISM ASSEMBLY).

## SPECIFICATION

### Camcorder

#### General

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| **Power consumption** | |
| **LCD monitor off, viewfinder on** | : Approx. 3.4 W |
| **LCD monitor on, viewfinder off** | : Approx. 4.7 W |
| **Dimensions (W x H x D)** | : 69 mm x 94 mm x 143 mm (with the LCD monitor closed and the viewfinder pushed back in) |
| **Weight** | : Approx. 525 g |
| **Operating temperature** | : 0°C to 40°C |
| **Operating humidity** | : 35% to 80% |
| **Storage temperature** | : -20°C to 50°C |
| **Pickup** | : 1/6" CCD |
| **Lens** | : F 1.6, f = 2.7 mm to 43.2 mm, 16:1 power zoom lens |
| **Filter diameter** | : Ø37 mm |
| **LCD monitor** | : 2.5" diagonally measured, LCD panel/TFT active matrix system |
| **Viewfinder** | : Electronic viewfinder with 0.24" black/white LCD |
| **Speaker** | : Monaural |

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| **Picture quality** | : 2 modes (FINE/STANDARD) |
| **Approximate number of storable images** | : pg. 18. |

#### Connectors

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| **Input*** | : Y : 0.8 V (p-p) -1.2 V (p-p), 75 Ω, analogue<br>C : 0.2 V (p-p) -0.4 V (p-p), 75 Ω, analogue |
| **AV** | |
| **Video output** | : 1 V (p-p), 75 Ω, analogue |
| **Video input*** | : 0.8 V (p-p) -1.2 V (p-p), 75 Ω, analogue |
| **Audio output** | : 300 mV (rms), 1 kΩ, analogue, stereo |
| **Audio input*** | : 300 mV (rms), 50 kΩ, analogue, stereo |
| **DV** | |
| **Output** | : 4-pin, IEEE 1394 compliant |
| **Input** | : 4-pin, IEEE 1394 compliant |
| **USB*** | : 5-pin |
| **EDIT** | : Ø3.5 mm, 2-pole |

* GR-D70 only

#### *AC Adapter*

| | |
|---|---|
| **Power requirement** | : AC 110 V to 240 V ~, 50 Hz/60 Hz |
| **Output** | : DC 11 V ⎓, 1 A |

***Specifications shown are for SP mode unless otherwise indicated. E & O.E. Design and specifications subject to change without notice.***

GR-D70EK,GR-D70EX,GR-D70EY,GR-D70EZ M3D127

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| MODEL NUMBER | GR-D70EK | GR-D70EX | GR-D70EY | GR-D70EZ |
|---|---|---|---|---|
| POWER CORD | BS TYPE | CEE TYPE | CEE TYPE | CEE TYPE |

# SECTION 1
# PRECAUTIONS

## 1.1 SAFTY PRECAUTIONS

Prior to shipment from the factory, JVC products are strictly inspected to conform with the recognized product safety and electrical codes of the countries in which they are to be sold.However,in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

### 1.1.1 Precautions during Servicing

(1) Locations requiring special caution are denoted by labels and inscriptions on the cabinet, chassis and certain parts of the product.When performing service, be sure to read and comply with these and other cautionary notices appearing in the operation and service manuals.

(2) Parts identified by the ⚠symbol and shaded ( ) parts are critical for safety.
Replace only with specified part numbers.
**NOTE :**
**Parts in this category also include those specified to comply with X-ray emission standards for products using cathode ray tubes and those specified for compliance with various regulations regarding spurious radiation emission.**

(3) Fuse replacement caution notice.
Caution for continued protection against fire hazard.
Replace only with same type and rated fuse(s) as specified.

(4) Use specified internal wiring. Note especially:
- Wires covered with PVC tubing
- Double insulated wires
- High voltage leads

(5) Use specified insulating materials for hazardous live parts. Note especially:
- Insulation Tape
- PVC tubing
- Spacers
- Insulation sheets for transistors
- Barrier

(6) When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.) wrap ends of wires securely about the terminals before soldering.

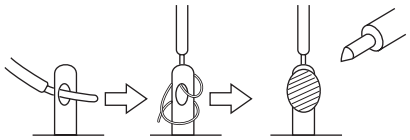


Fig.1-1-1

(7) Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.)

(8) Check that replaced wires do not contact sharp edged or pointed parts.

(9) When a power cord has been replaced, check that 10-15 kg of force in any direction will not loosen it.

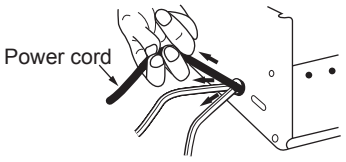



Fig.1-1-2

(10) Also check areas surrounding repaired locations.

(11) Products using cathode ray tubes (CRTs)In regard to such products, the cathode ray tubes themselves, the high voltage circuits, and related circuits are specified for compliance with recognized codes pertaining to X-ray emission. Consequently, when servicing these products, replace the cathode ray tubes and other parts with only the specified parts. Under no circumstances attempt to modify these circuits.Unauthorized modification can increase the high voltage value and cause X-ray emission from the cathode ray tube.

(12) Crimp type wire connector
In such cases as when replacing the power transformer in sets where the connections between the power cord and power trans former primary lead wires are performed using crimp type connectors, if replacing the connectors is unavoidable, in order to prevent safety hazards, perform carefully and precisely according to the following steps.
- **Connector part number** :E03830-001
- **Required tool** : Connector crimping tool of the proper type which will not damage insulated parts.
- **Replacement procedure**
  a) Remove the old connector by cutting the wires at a point close to the connector.
  Important : Do not reuse a connector (discard it).

Fig.1-1-3

  b) Strip about 15 mm of the insulation from the ends of the wires. If the wires are stranded, twist the strands to avoid frayed conductors.

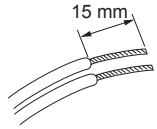



Fig.1-1-4

  c) Align the lengths of the wires to be connected. Insert the wires fully into the connector.

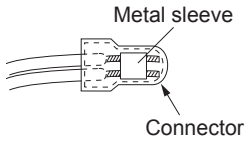



Fig.1-1-5

  d) As shown in Fig.1-1-6, use the crimping tool to crimp the metal sleeve at the center position. Be sure to crimp fully to the complete closure of the tool.

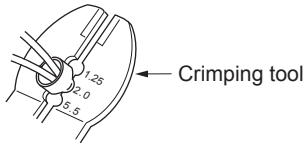



Fig.1-1-6

  e) Check the four points noted in Fig.1-1-7.

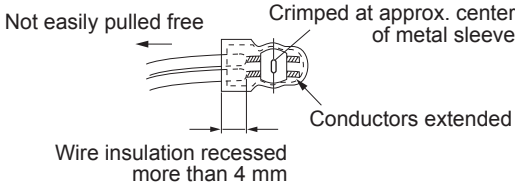

Not easily pulled free
Crimped at approx. center of metal sleeve
Conductors extended
Wire insulation recessed more than 4 mm

Fig.1-1-7

### 1.1.2 Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions, Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

(1) Insulation resistance test
Confirm the specified insulation resistance or greater between power cord plug prongs and externally exposed parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).
See table 1 below.

(2) Dielectric strength test
Confirm specified dielectric strength or greater between power cord plug prongs and exposed accessible parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See Fig.1-1-11 below.

(3) Clearance distance
When replacing primary circuit components, confirm specified clearance distance (d), (d') between soldered terminals, and between terminals and surrounding metallic parts. See Fig.1-1-11 below.

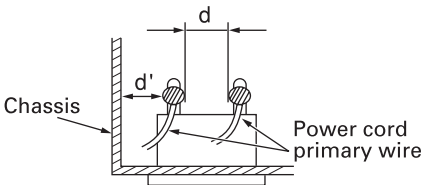


Fig.1-1-8

(4) Leakage current test
Confirm specified or lower leakage current between earth ground/power cord plug prongs and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).
Measuring Method : (Power ON)
Insert load Z between earth ground/power cord plug prongs and externally exposed accessible parts. Use an AC voltmeter to measure across both terminals of load Z. See Fig.1-1-9 and following Fig.1-1-12.

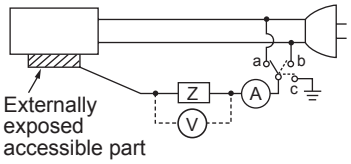
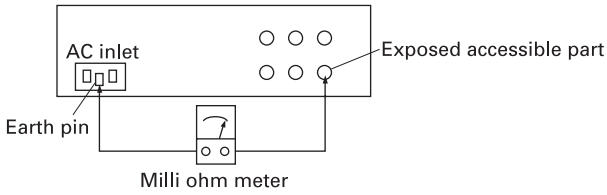


Fig.1-1-9

(5) Grounding (Class 1 model only)
Confirm specified or lower grounding impedance between earth pin in AC inlet and externally exposed accessible parts (Video in, Video out, Audio in, Audio out or Fixing screw etc.).
Measuring Method:
Connect milli ohm meter between earth pin in AC inlet and exposed accessible parts. See Fig.1-1-10 and grounding specifications.




**Grounding Specifications**

| Region | Grounding Impedance (Z) |
|---|---|
| USA & Canada | Z ≦ 0.1 ohm |
| Europe & Australia | Z ≦ 0.5 ohm |

Fig.1-1-10

| AC Line Voltage | Region | Insulation Resistance (R) | Dielectric Strength | Clearance Distance (d), (d') |
|---|---|---|---|---|
| 100 V | Japan | R ≧ 1 MΩ/500 V DC | AC 1 kV 1 minute | d, d' ≧ 3 mm |
| 100 to 240 V | | | AC 1.5 kV 1 miute | d, d' ≧ 4 mm |
| 110 to 130 V | USA & Canada | 1 MΩ ≦ R ≦ 12 MΩ/500 V DC | AC 1 kV 1 minute | d, d' ≧ 3.2 mm |
| 110 to 130 V<br>200 to 240 V | Europe & Australia | R ≧ 10 MΩ/500 V DC | AC 3 kV 1 minute (Class Ⅱ)<br>AC 1.5 kV 1 minute (Class Ⅰ) | d ≧ 4 mm<br>d' ≧ 8 mm (Power cord)<br>d' ≧ 6 mm (Primary wire) |

Fig.1-1-11

| AC Line Voltage | Region | Load Z | Leakage Current (i) | a, b, c |
|---|---|---|---|---|
| 100 V | Japan | 1 kΩ | i ≦ 1 mA rms | Exposed accessible parts |
| 110 to 130 V | USA & Canada | 0.15 μF, 1.5 kΩ | i ≦ 0.5 mA rms | Exposed accessible parts |
| 110 to 130 V<br>220 to 240 V | Europe & Australia | 2 kΩ | i ≦ 0.7 mA peak<br>i ≦ 2 mA dc | Antenna earth terminals |
| | | 50 kΩ | i ≦ 0.7 mA peak<br>i ≦ 2 mA dc | Other terminals |

Fig.1-1-12

**NOTE :**

These tables are unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

# SECTION 2
# SPECIFIC SERVICE INSTRUCTIONS

## 2.1 BEFORE ASSEMBLY AND DISASSEMBLY

### 2.1.1 Precautions

1. Be sure to disconnect the power supply unit prior to mounting and soldering of parts.
2. Prior to removing a component part that needs to disconnect its connector(s) and its screw(s), first disconnect the wire(s) from the connector(s), and then remove the screw(s).
3. When connecting/disconnecting wires, pay enough attention not to damage the connectors.
4. Be careful in removing or handling the part to which some spacer or shield is attached for reinforcement or insulation.
5. When replacing chip parts (especially IC parts), first remove the solder completely to prevent peeling of the pattern.
6. Tighten screws properly during the procedures. Unless specified otherwise, tighten screws at a torque of 0.088N•m (0.9kgf•cm).

### 2.1.2 Assembly and disassembly

[Example]

| STEP No. | PART | Fig. No. | POINT | NOTE |
|---|---|---|---|---|
| [1] | TOP COVER ASSEMBLY | Fig.C1 | S1,2(L1) | - |
| [2] | UPPER ASSEMBLY (Inc. VF ASSEMBLY, SPEAKER/MONITOR) | Fig.C2-1 | S2a,2(S2b),3(S2c) 2(S2d),S2e,S2c L2,CN2a,b | - |
| [8] | VF ASSEMBLY | Fig.C2-2 | 2(S8),L8,CN8a | NOTE 8a NOTE 8b |
| | | | | |
| (1) | (2) | (3) | (4) | (5) |

(1) Order of steps in Procedure
When reassembling, preform the step(s) in the reverse order. These numbers are also used as the identification (location) No. of parts Figures.

(2) Part to be removed or installed.

(3) Fig. No. showing Procedure or Part Location.

C = CABINET
D = CAMERA AND BOARD ASSEMBLY

(4) Identification of part to be removed, unhooked, unlocked, released, unplugged, unclamped or unsoldered.

P = Spring
W = Washer
S = Screw
* = Unhook, unlock, release, unplug or unsolder.
2(S3) = 2 Screws (S3)
CN = Connector

(5) Adjustment information for installation.

### 2.1.3 Destination of connectors

*Two kinds of double-arrows in connection tables respectively show kinds of connector/wires.*

⇔ : Flat wire
↔ : Wire

[Example]

| CONN. No. | CONNECTOR | | | | | Pin No. |
|---|---|---|---|---|---|---|
| CN2a | MAIN | CN101 | ⇔ | MONIBW | CN761 | 40 |
| CN2b | MAIN | CN103 | ⇔ | MINIBW | CN762 | 10 |

Remove the parts marked in .

### 2.1.4 Disconnection of connectors (Wires)

Pull both ends of the connector in the arrow direction, remove the lock and disconnect the flat wire.

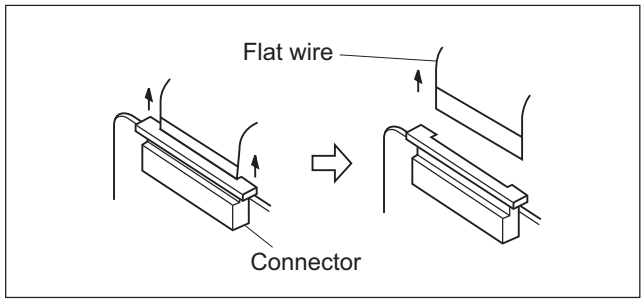



Fig.2-1-1

Extend the locks in the direction of the arrow for unlocking and then pull out the wire. After removing the wire, immediately restore the locks to their original positions because the locks are apt to come off the connector.

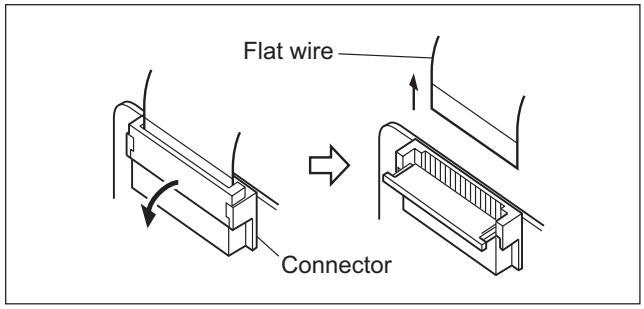



Fig.2-1-2

### 2.1.5 Tools required for disassembly and assembly

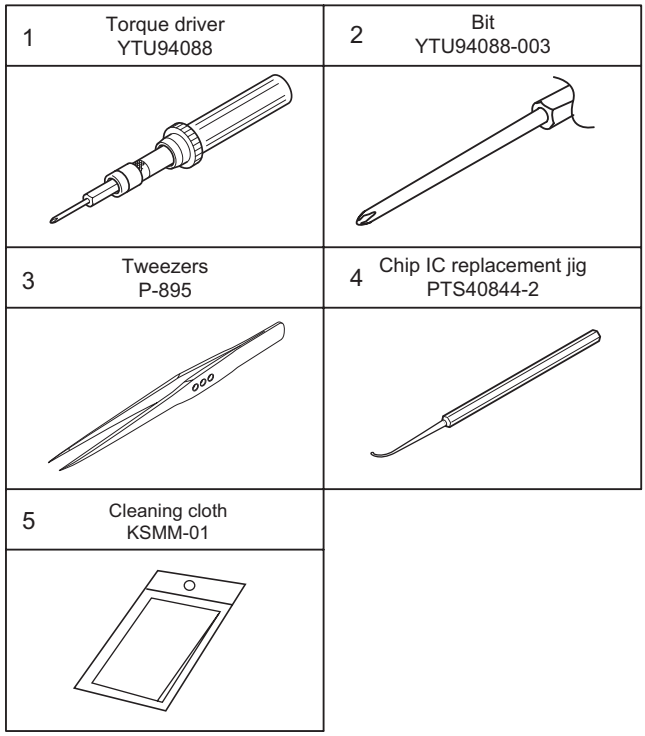



Fig.2-1-3

**1.Torque driver**
Be sure to use to fastening the mechanism and exterior parts because those parts must strictly be controlled for tightening torque.

**2.Bit**
This bit is slightly longer than those set in conventional torque drivers.

**3.Tweezers**
To be used for removing and installing parts and wires.

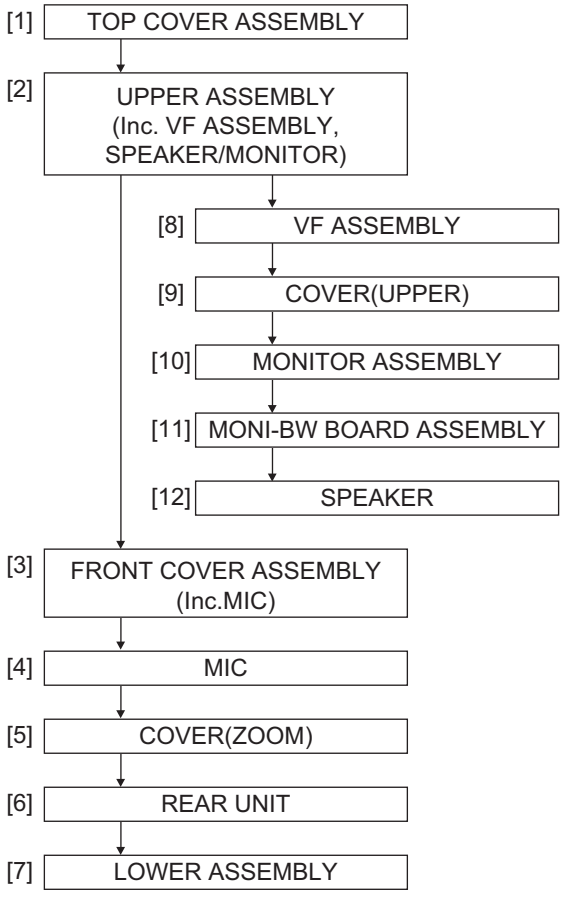
**4.Chip IC replacement jig**
To be used for replacement of IC.

**5.Cleaning cloth**
Recommended cleaning cloth to wipe down the video heads, mechanism (tape transport system), optical lens surface.

## 2.2 ASSEMBLY AND DISASSEMBLY OF CABINET PARTS

### 2.2.1 Disassembly flow chart

This flowchart indicates the disassembly step for the cabinet parts and board assembly in order to gain access to item(s) to be serviced. When reassembling, perform the step(s) in reverse order.




### 2.2.2 Disassembly method

| STEP No. | PART | Fig. No. | POINT | NOTE |
|---|---|---|---|---|
| [1] | TOP COVER ASSEMBLY | Fig.C1 | S1,2(L1) | - |
| [2] | UPPER ASSEMBLY (Inc. VF ASSEMBLY, SPEAKER/MONITOR) | Fig.C2-1 | S2a,2(S2b),3(S2c) 2(S2d),S2e,S2c L2,CN2a,b | - |
| [8] | VF ASSEMBLY | Fig.C2-2 | 2(S8),L8,CN8a | NOTE 8a NOTE 8b |
| [9] /[10] | COVER(UPPER) MONITOR ASSEMBLY | Fig.C2-3 | 2(S9),L9 2(S10a),CN10a,2(S10b),L10 | - NOTE 10a NOTE 10b |
| [11] /[12] | MONI-BW BOARD ASSEMBLY SPEAKER | Fig.C2-4 | 2(S11a),2(S11b),4(S11c) BKT(HINGE),KNOB(SLIDE) | NOTE 11a NOTE 11b NOTE 11c |
| [3] / [4] | FRONT COVER ASSEMBLY (Inc.MIC) MIC | Fig.C3 | COVER(JACK),S3,L3a,L3b CN4 S4 | NOTE 3 |
| [5] /[6] /[7] | COVER(ZOOM) REAR UNIT LOWER ASSEMBLY | Fig.C4 | S5a,3(S5b),2(L5) CN6,S6 CN7a,b,S7a,3(S7b) | - |

| CONN. No. | CONNECTOR | | | | | Pin No. |
|---|---|---|---|---|---|---|
| CN2a | MAIN | CN101 | ⇔ | MONI-BW | CN761 | 40 |
| CN2b | MAIN | CN103 | ⇔ | MONI-BW | CN762 | 10 |
| CN8a | MONI-BW | CN763 | ⇔ | VF ASSEMBLY | - | 20 |
| CN10a | MONI-BW | CN765 | ⇔ | BL-2.5/3.5 | - | 32 |
| CN4 | MAIN | CN106 | ↔ | MIC | - | 5 |
| CN6 | MAIN | CN104 | ↔ | REAR UNIT | - | 11 |
| CN7a | MAIN | CN102 | ⇔ | JACK | CN501 | 22 |
| CN7b | MAIN | CN109 | ⇔ | ZOOM UNIT | - | 16 |

Remove the parts marked in .

**NOTE 8a:**
Take care not to cut the FPC wire when and after removing the VF ASSEMBLY.

**NOTE 8b:**
As for disassembly/assembly of [8]VF ASSEMBLY, see 2.4 ASSEMBLY AND DISASSEMBLY OF [8] VF ASSEMBLY.

**NOTE 10a:**
Take care not to cut the FPC when and after removing the MONITOR ASSEMBLY.

**NOTE 10b:**
As for disassembly/assembly of [10] MONITOR ASSEMBLY, see 2.5 ASSEMBLY AND DISASSEMBLY OF [10] MONITOR ASSEMBLY.

**NOTE 11a:**
Before removing the MONI-BW BOARD ASSEMBLY, check whether MEMORY CARD is inserted or not. If MEMORY CARD is inserted, pull out the MEMORY CARD before removing the MONI-BW BOARD ASSEMBLY.

**NOTE 11b:**
Since the SPEAKER is soldered to the MONI-BW BOARD ASSEMBLY, the SPEAKER should not be separated from the MONI-BW BOARD ASSEMBLY except when replacing the SPEAKER.

**NOTE 11c:**
Take care not to lose the KNOB(SLIDE). When attaching the KNOB(SLIDE), attach the KNOB(SLIDE) in a proper position.

**NOTE 3:**
After removing the FRONT COVER ASSEMBLY, OP BLOCK ASSEMBLY is not covered with anything. Take care not to damage the OP BLOCK ASSEMBLY when and after removing the FRONT COVER ASSEMBLY.

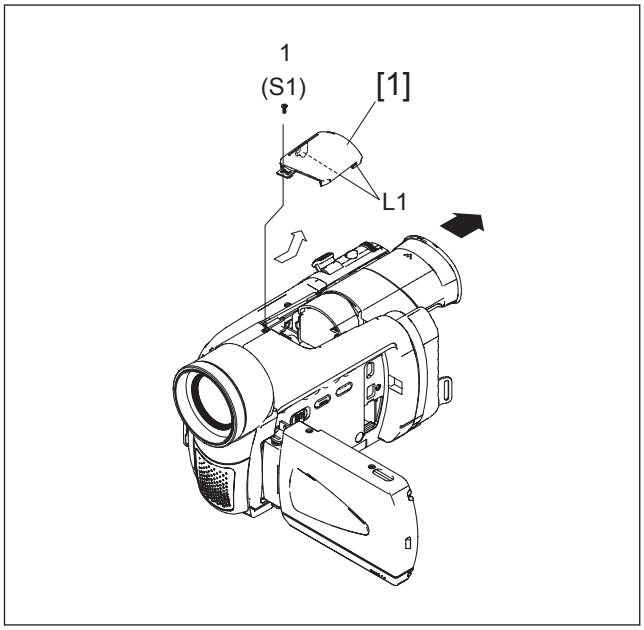



Fig.C1

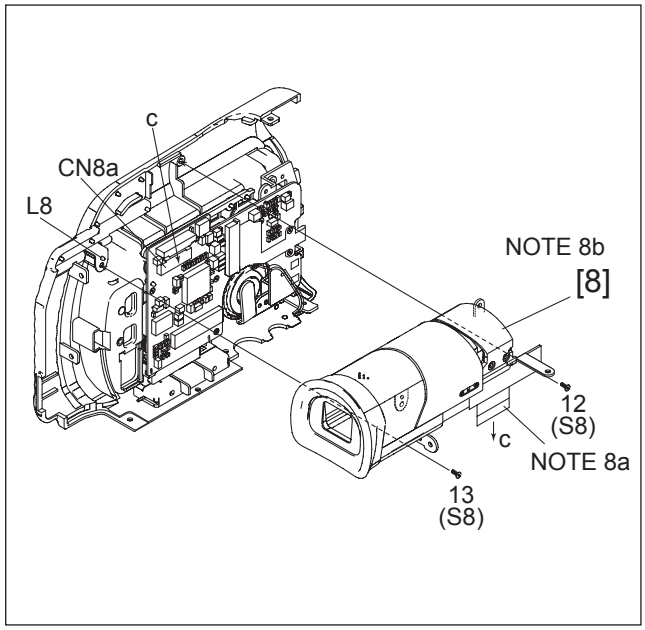



Fig.C2-2

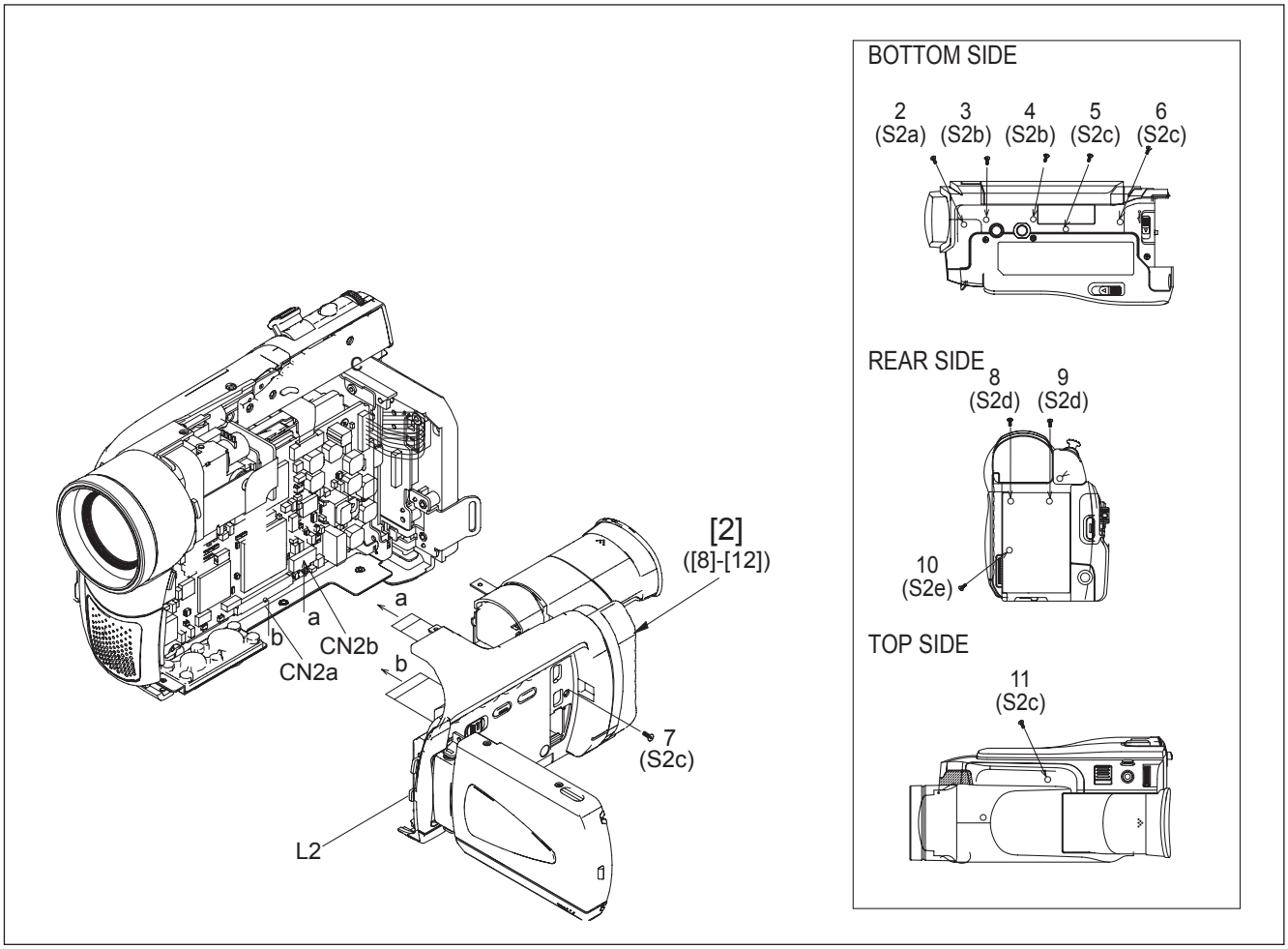



Fig.C2-1

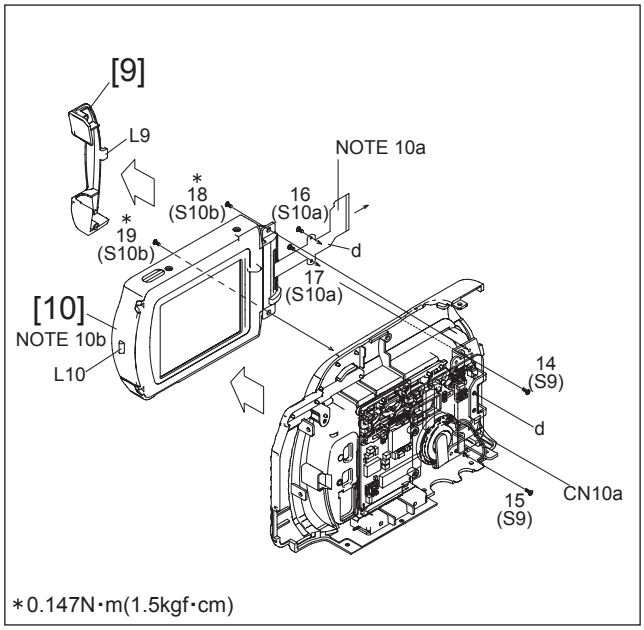



Fig.C2-3

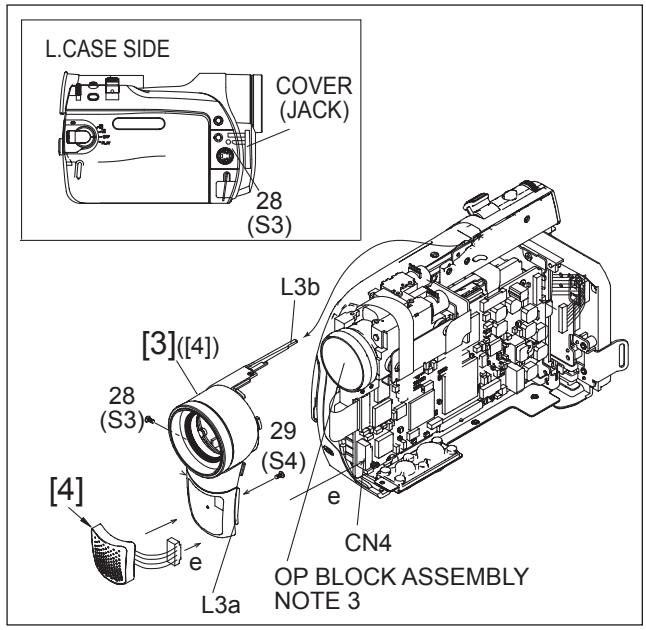



Fig.C3

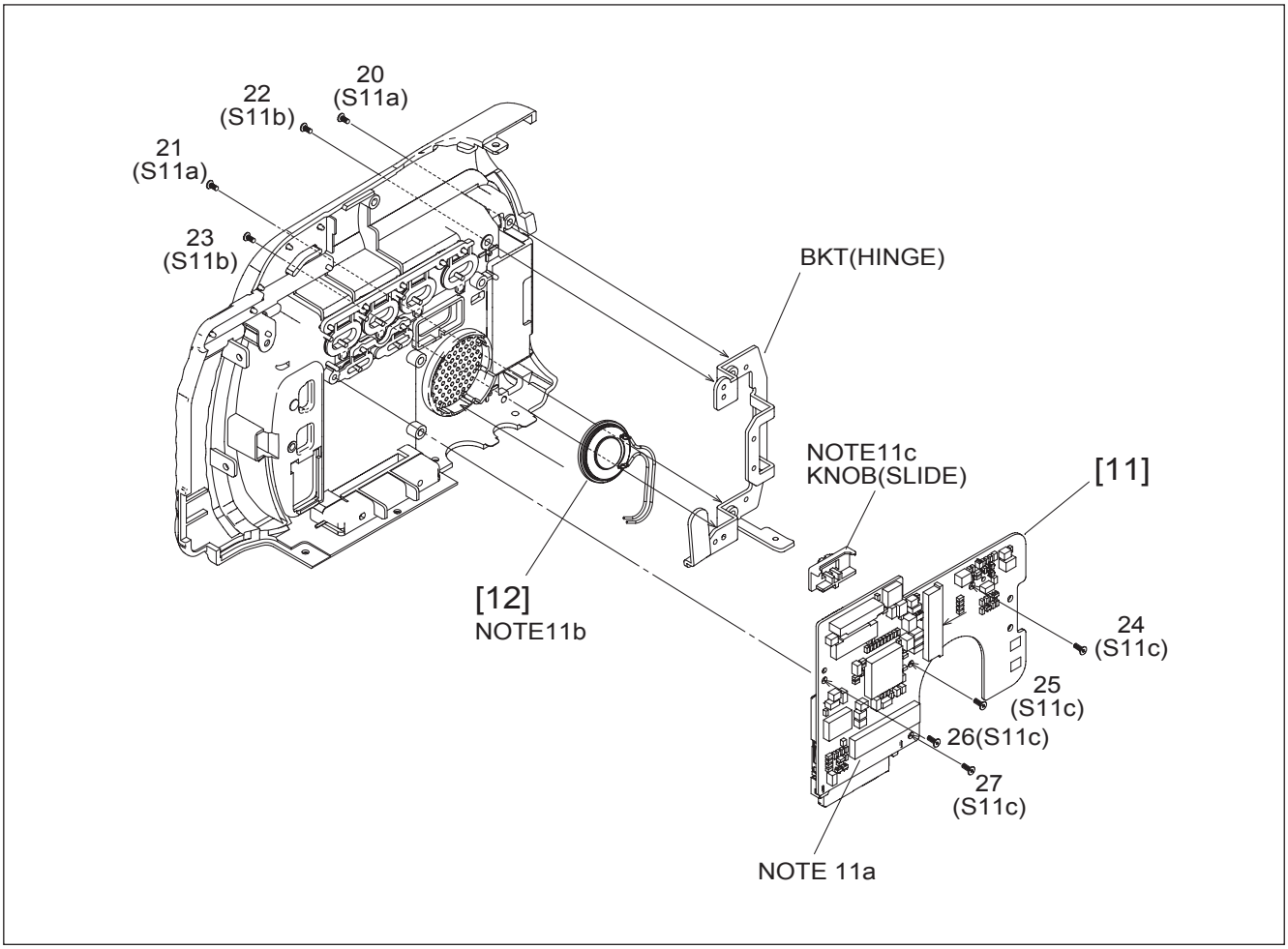



Fig.C2-4

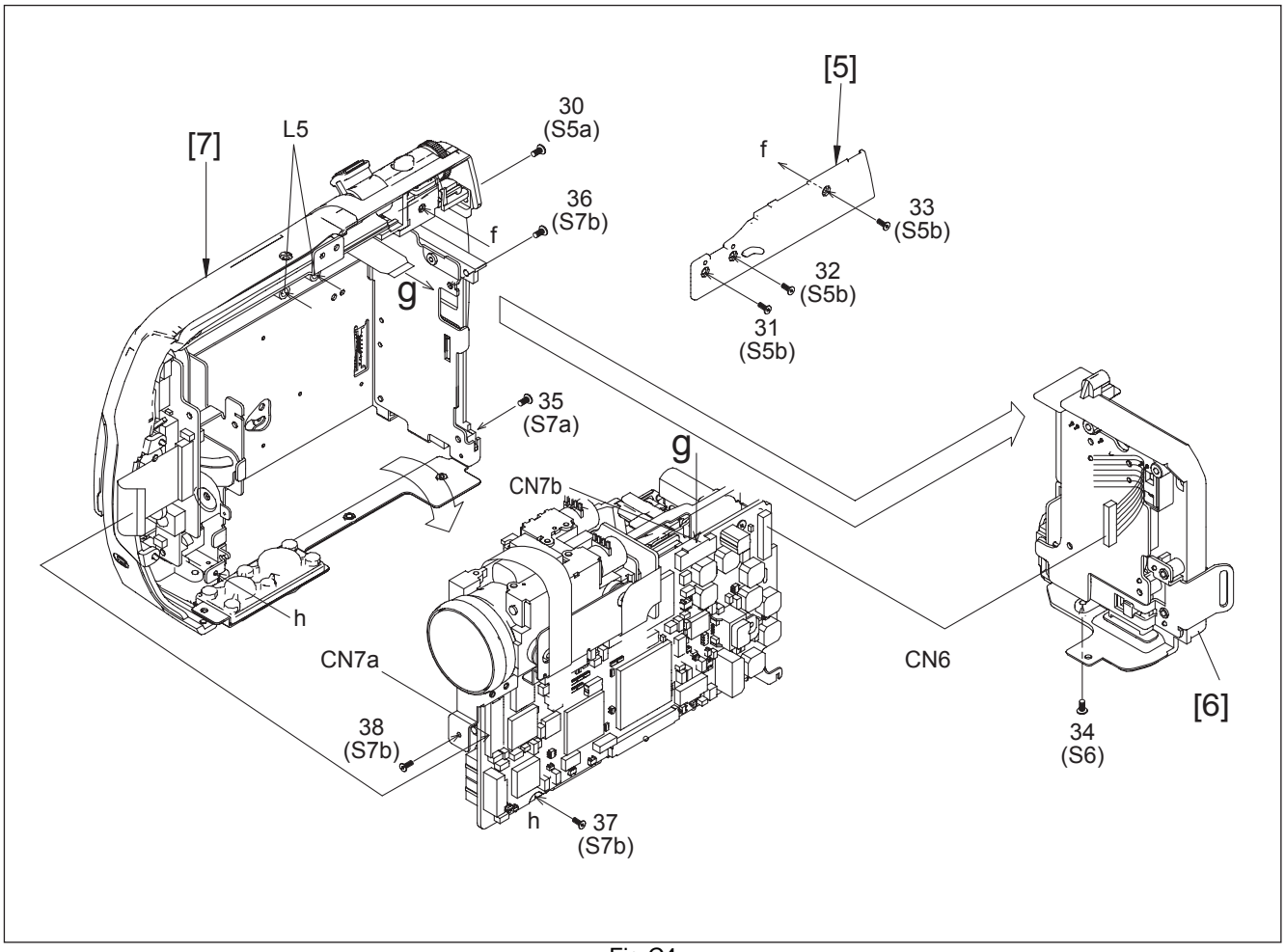

[5]
[7]
L5
30
(S5a)
36
(S7b)
f
g
f
33
(S5b)
32
(S5b)
31
(S5b)
35
(S7a)
g
CN7b
h
CN7a
CN6
[6]
38
(S7b)
34
(S6)
h
37
(S7b)

Fig.C4

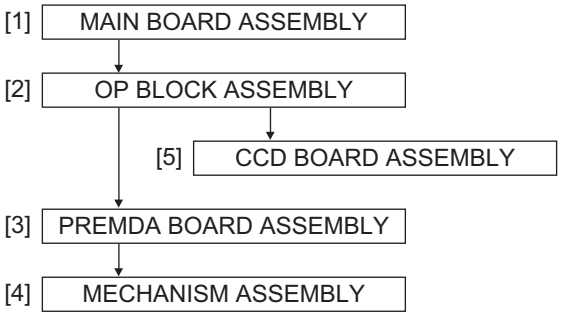
## 2.3 ASSEMBLY AND DISASSEMBLY OF CAMERA SECTION AND BOARD ASSEMBLY

### 2.3.1 Disassembly flow chart

This flowchart indicates the disassembly step for the cabinet parts and board assembly in order to gain access to item(s) to be serviced. When reassembling, perform the step(s) in reverse order.

**NOTE:**

Please see Service Manual No. 86700 (MECHANISM ASSY).




### 2.3.2 Disassembly method

| STEP No. | PART | Fig. No. | POINT | NOTE |
|---|---|---|---|---|
| [1] | MAIN BOARD ASSEMBLY | Fig.D1 | CN1a,b,2(S1),CN1c,d | - |
| [2]/[5] | OP BLOCK ASSEMBLY / CCD BOARD ASSEMBLY | Fig.D2 | S2,L2 | NOTE 2 |
| [3] | PREMDA BOARD ASSEMBLY | Fig.D3 | 2(S3a),L3,SHIELD COVER(PR) CN3a,b,c,d,e,f,2(S3b) | - |
| [4] | MECHANISM ASSEMBLY | | 3(S4),BKT(MECHA) | - |

| CONN. No. | CONNECTOR | | | | | Pin No. |
|---|---|---|---|---|---|---|
| CN1a | MAIN | CN108 | ⇔ | OP BLOCK ASSEMBLY | CN501 | 24 |
| CN1b | MAIN | CN107 | ⇔ | CCD | CN5001 | 20 |
| CN1c | MAIN | CN111 | ⇔ | PREMDA | CN408 | 40 |
| CN1d | MAIN | CN110 | ⇔ | PREMDA | CN401 | 40 |
| CN3a | PREMDA | CN406 | ⇔ | SENSOR | - | 16 |
| CN3b | PREMDA | CN405 | ⇔ | CAPSTAN MOTOR | - | 18 |
| CN3c | PREMDA | CN404 | ⇔ | DRUM MOTOR | - | 11 |
| CN3d | PREMDA | CN402 | ⇔ | HEAD | - | 8 |
| CN3e | PREMDA | CN403 | ⇔ | LOADING MOTOR | - | 6 |
| CN3f | PREMDA | CN407 | ⇔ | ROTARY ENCODER | - | 6 |

Remove the parts marked in .

**NOTE 2:**

As for disassembly/assembly of [2] OP BLOCK ASSEMBLY, see 2.6 ASSEMBLY AND DISASSEMBLY OF [2] OP BLOCK ASSEMBLY.

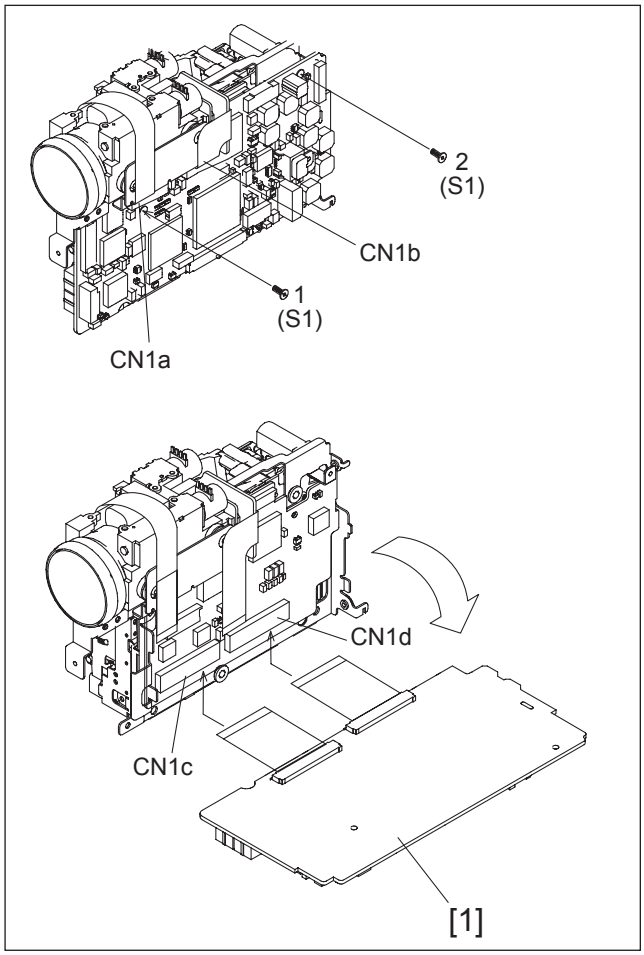



Fig.D1

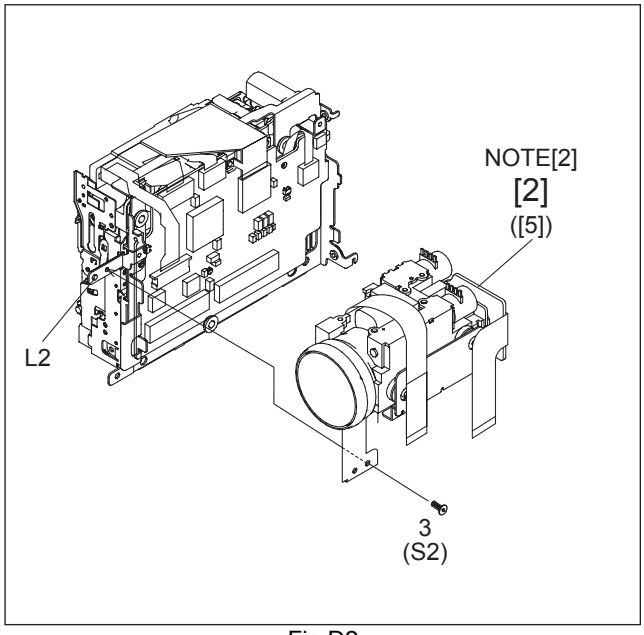



Fig.D2

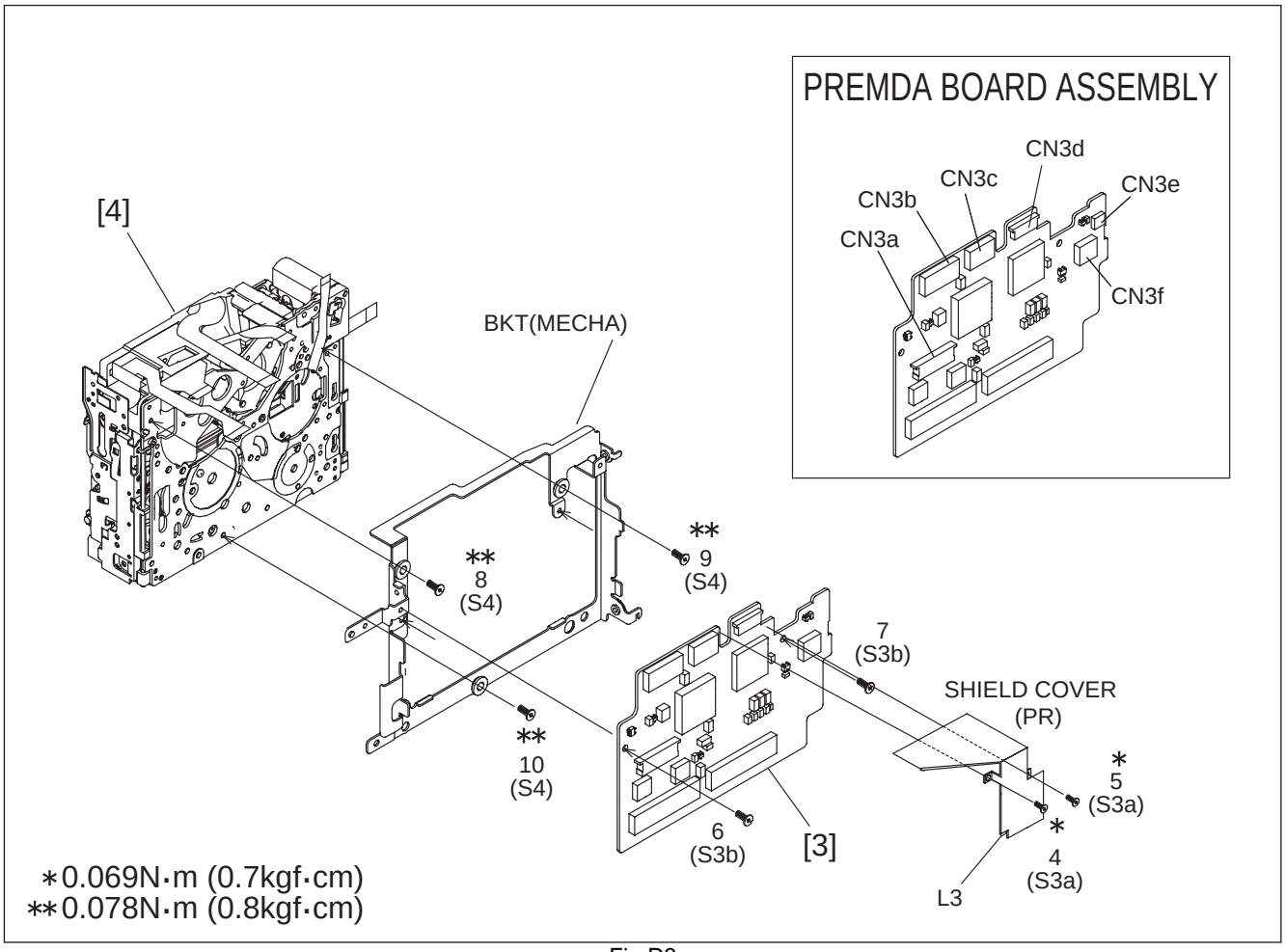

PREMDA BOARD ASSEMBLY
CN3d
CN3c
CN3e
CN3b
CN3a
CN3f
[4]
BKT(MECHA)
** 9 (S4)
** 8 (S4)
** 10 (S4)
7 (S3b)
SHIELD COVER (PR)
* 5 (S3a)
* 4 (S3a)
6 (S3b)
[3]
L3
*0.069N·m (0.7kgf·cm)
**0.078N·m (0.8kgf·cm)

Fig.D3

## 2.4 ASSEMBLY AND DISASSEMBLY OF [8]VF ASSEMBLY

### 2.4.1 Disassembly of VF ASSEMBLY

(1) Remove the EYE CUP.
(2) Remove the four screws (1 to 4) and then remove the COVER (VF).
(3) Remove the two screws (5 and 6) and then remove the FPC BOARD from the hook attaching the FPC BOARD.

**NOTE 8a:**
During the procedure, be careful not to damage the FPC. When attaching the SW BOARD ASSEMBLY, attach the SW BOARD ASSEMBLY so that the SW BOARD ASSEMBLY comes upwards.

(4) Remove the four screws (7 to 10), and then pull out and remove the FPC from the VF HINGE ASSEMBLY.

**NOTE 8b:**
During the procedure, be careful not to damage the FPC and the SWITCH.

(5) Remove the five screws (11 to 15).
(6) Remove the UPPER CASE(VF) R.
(7) Remove the UPPER CASE(VF) F and then pull out the LENS SA and the LCD UNIT ASSEMBLY with the FPC.

**NOTE 8c:**
In attaching the LCD UNIT ASSEMBLY, put the projections of the LCD UNIT ASSEMBLY in the slots of the BOTTOM CASE(VF). Put the STOPPER of the FPC inside the BOTTOM CASE(VF). In attaching the UPPER CASE(VF) F and the UPPER CASE(VF) R, attach the UPPER CASE(VF) F first and then the UPPER CASE(VF) R and be careful to keep the FPC inside the BOTTOM CASE(VF).

### 2.4.2 Disassembly of the LENS SA

(1) Remove the LEVER(LENS).
(2) Remove the SHEET(LENS).
(3) Remove the LENS ASSEMBLY from the GUIDE LENS(VF).

**NOTE 8d:**
Be careful not to lose the SPRING(LENS).

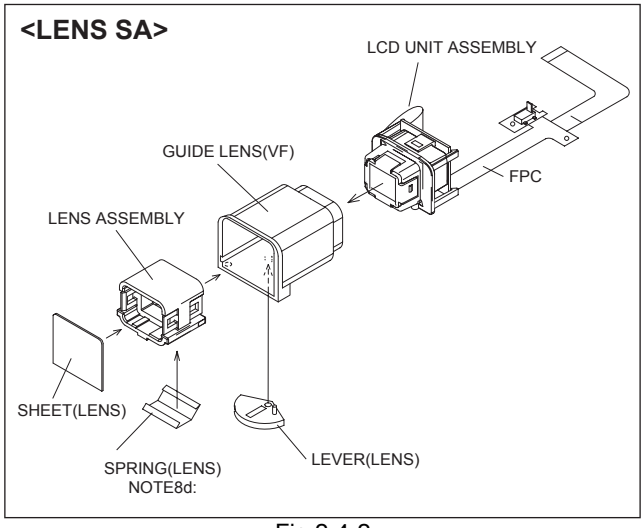



Fig.2-4-2

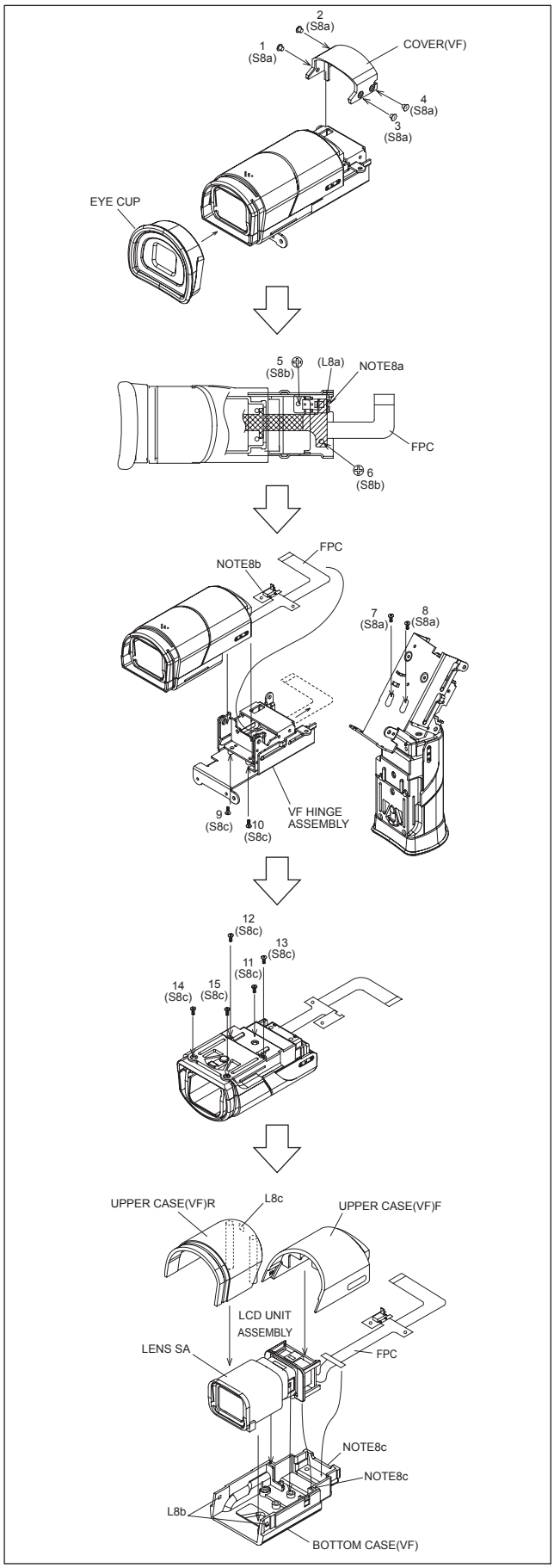



Fig.2-4-1

## 2.5 ASSEMBLY AND DISASSEMBLY OF [10]MONITOR ASSEMBLY (CABINET PARTS)

### 2.5.1 Disassembly of MONITOR ASSEMBLY (2.5 INCH)

**NOTE:**

Be careful in removing or handling the monitor assembly, especially not to soil or scratch the monitor screen during the disassembly procedure.

(1) While removing the four screws (1 to 4) in numerical order and then disengaging the four hooks (L10a-L10d) in alphabetical order, open and remove the MONITOR COVER ASSEMBLY.

(2) Remove the SENSOR BOARD ASSEMBLY from the MONITOR CASE.

(3) Disconnect the FPC in the connectors CN10a and CN10b in this order, and then remove the MONI.HINGE ASSEMBLY.

(4) Disconnect the FPC of the LCD MODULE from the connector CN10c.

(5) Remove one screw (5) and then remove the BL BOARD ASSEMBLY together with the BACK LIGHT ASSEMBLY.

**NOTE 10a:**

It depends on the inch size of the monitor assembly whether the backlight is supplied as an assembly or as separated parts.

In replacing the backlight assembly, see the Parts List.

**NOTE 10b:**

Since the BACK LIGHT ASSEMBLY is soldered to the BL BOARD ASSEMBLY, the BACK LIGHT should not be separated from the BL BOARD ASSEMBLY except when replacing them.

(6) Remove the DIFF.SHEET.

(7) Remove the LCD FRAME together with the LCD MODULE.

(8) Remove the SHIELD CASE.

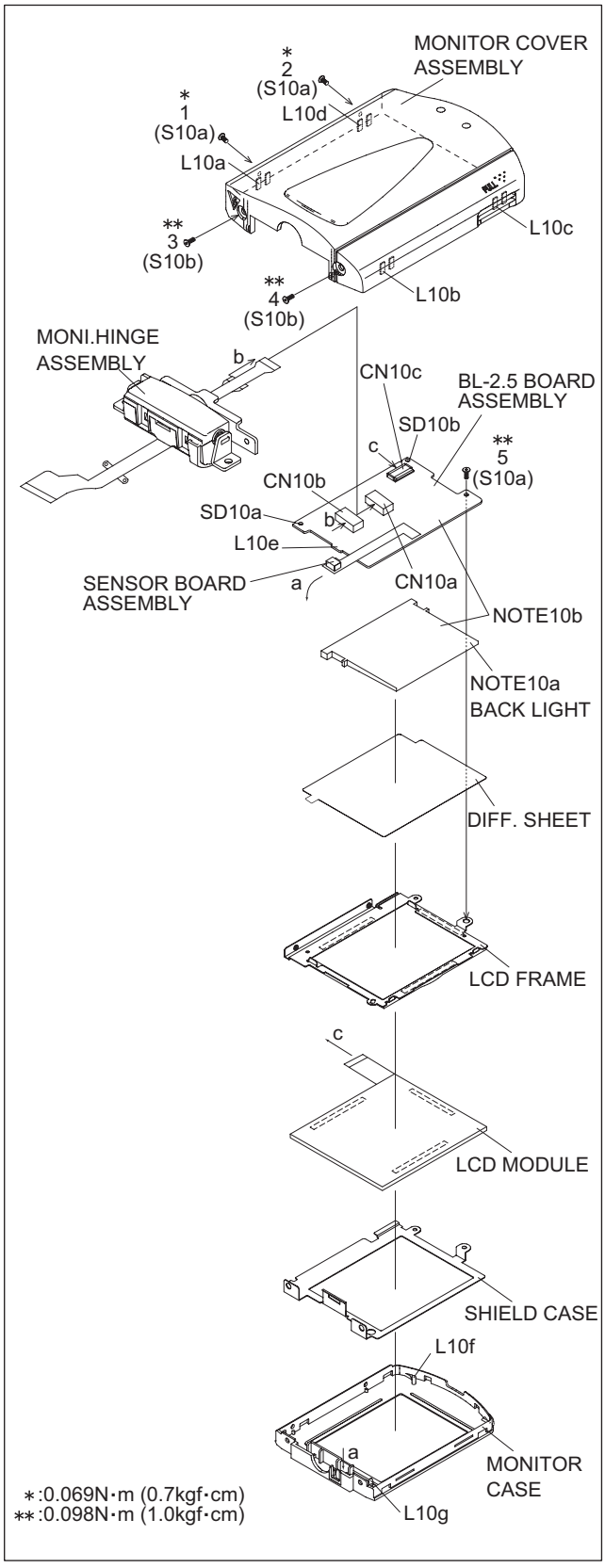



Fig.2-5-1

### 2.5.2 Disassembly of MONITOR ASSEMBLY (3.5 INCH)

**NOTE:**

Be careful in removing or handling the monitor assembly, especially not to soil or scratch the monitor screen during the disassembly procedure.

(1) While removing the four screws (1 to 4) in numerical order and then disengaging the four hooks (L10a-L10d) in alphabetical order, open and remove the MONITOR COVER ASSEMBLY.

(2) Remove the SENSOR BOARD ASSEMBLY from the MONITOR CASE.

(3) Disconnect the FPC in the connectors CN10a and CN10b in this order, and then remove the MONI.HINGE ASSEMBLY.

(4) Disconnect the FPC of the LCD MODULE from the connector CN10c.

(5) Remove one screw (5) and then remove the BL BOARD ASSEMBLY together with the BACK LIGHT.

**NOTE 10:**

Since the BACK LIGHT is soldered to the BL BOARD ASSEMBLY, the BACK LIGHT should not be separated from the BL BOARD ASSEMBLY except when replacing them.

(6) While removing the five hooks (L10e-L10i) in alphabetical order, remove the LCD FRAME together with the LCD MODULE.

(7) Remove the SHIELD CASE.

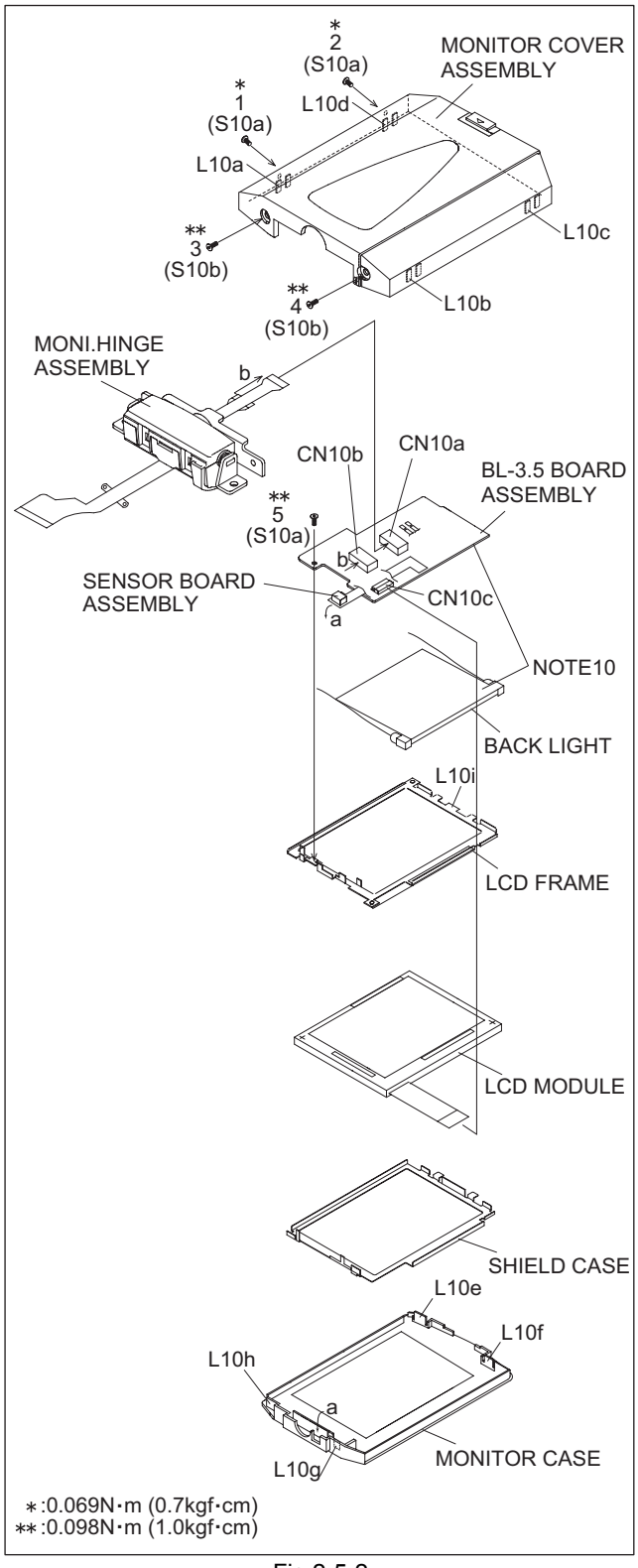



Fig.2-5-2

## 2.6 ASSEMBLY AND DISASSEMBLY OF [2]OP BLOCK ASSEMBLY / CCD BOARD ASSEMBLY (CAMERA SECTION AND BOARD ASSEMBLY)

### 2.6.1 Precautions

(1) Take care in handling the CCD IMAGE SENSOR, OP LPF and lens components when performing maintenance etc., especially with regard to surface contamination, attached dust or scratching. If fingerprints are present on the surface they should be wiped away using either a silicon paper, clean chamois or the cleaning cloth.

(2) The CCD IMAGE SENSOR may have been shipped with a protective sheet attached to the transmitting glass. When replacing the CCD IMAGE SENSOR, do not peel off this sheet from the new part until immediately before it is mounted in the OP BLOCK ASSEMBLY.

(3) The orientation of the OP LPF is an important factor for installation. If there is some marking on the OP LPF, be sure to note it down before removing and to reassemble it very carefully as it was referring to the marking.

### 2.6.2 Disassembly of CCD BOARD ASSEMBLY and CCD BASE ASSEMBLY

(1) Unsolder the CCD BOARD ASSEMBLY by the 14 points (SD2) and then remove it.

(2) Remove the two screws (1, 2) and remove the CCD BASE ASSEMBLY.

(3) Remove the SPACER.

(4) Remove the SHEET.

(5) Remove the OP LPF.

### 2.6.3 Assembly of CCD BASE ASSEMBLY and CCD BOARD ASSEMBLY

(1) Set the OP LPF to the OP BLOCK ASSEMBLY so that the OP side touches the OP BLOCK ASSEMBLY.

**NOTE 2a:**

Pay careful attention to the orientation of the OP LPF.

(2) Set the SHEET to the OP LPF not to come off the right position.

(3) Attach the SPACER to the OP BLOCK ASSEMBLY.

(4) Fasten them together with the two screws (1, 2).

(5) Set the CCD BOARD ASSEMBLY in the CCD BASE ASSEMBLY, and then solder it by the 14 points (SD2).

### 2.6.4 Replacement of service repair parts

The service repair parts for the OP BLOCK ASSEMBLY are as listed below.

Before replacement of these parts, remove the BRACKET (OP BLOCK ASSEMBLY) as required.

Take special care not to disconnect any of the FPC wires or cause any damage due to soldering (excessive heating).

(1) FOCUS MOTOR

(2) ZOOM MOTOR

(3) IRIS MOTOR UNIT

**NOTE 2b:**

When replacing the FOCUS MOTOR or the ZOOM MOTOR, solder the FPC at a space of about 1 mm above the terminal pin.

**NOTE 2c:**

The IRIS MOTOR UNIT includes the FPC ASSEMBLY and two sensors.

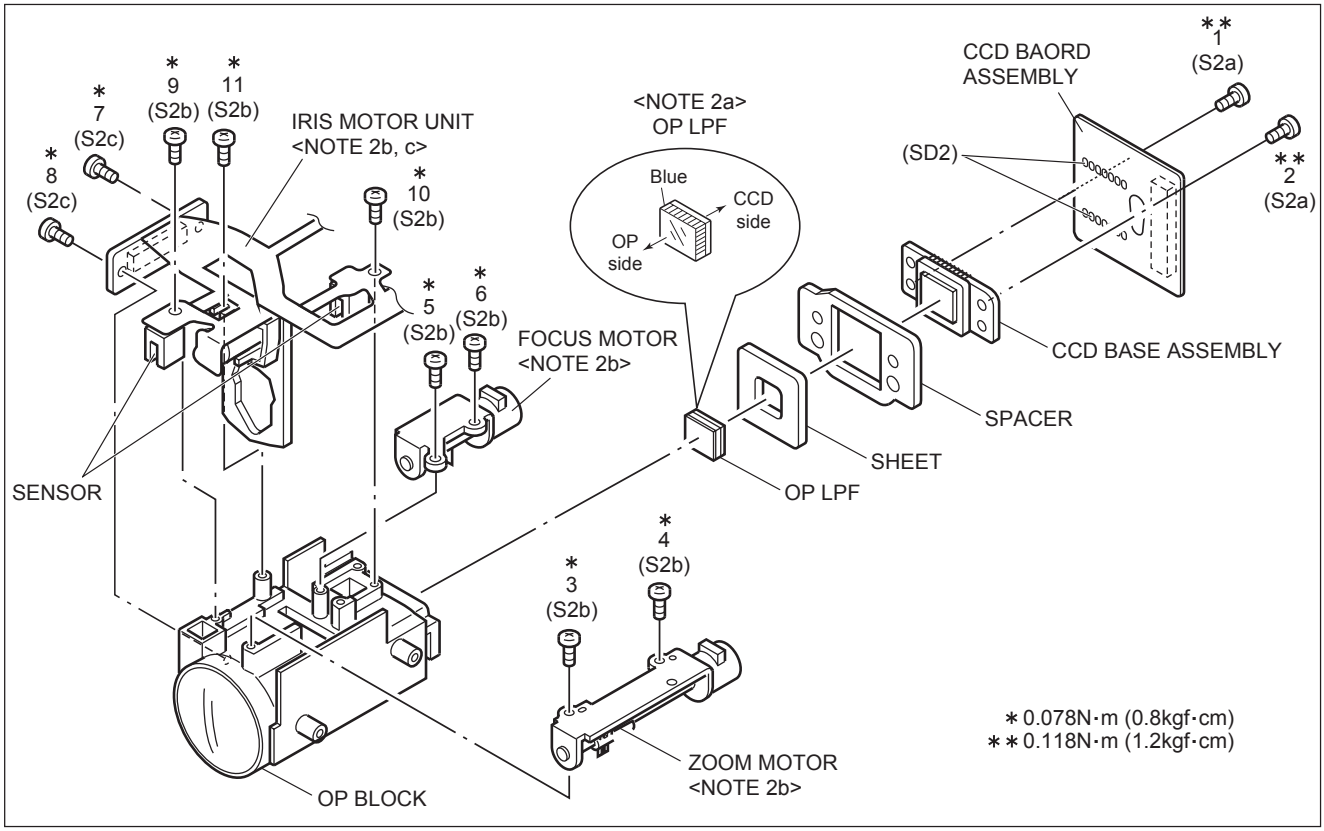



Fig.2-6-1

Use the following chart to manage screws

<CABINET PART>

| Symbol No. | [1] | [2] ([8]-[12]) | | | | | | | | | | [8] | | [9] | | [10] | | | | [11] ([12]) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Removing order of screw | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| Place to stick screw | | | | | | | | | | | | | | | | | | * | * | | | | | | | | |
| Reference drawing (Fig.No.) | C1 | C2-1 | | | | | | | | | | C2-2 | | C2-3 | | | | | | C2-4 | | | | | | | |
| Screw tightening torque | I | | | | | | | | | | | | | | | | | II | | I | | | | | | | |

| Symbol No. | [3] | [4] | [5] | | | | [6] | [7] | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Removing order of screw | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 |
| Place to stick screw | | | | | | | | | | | |
| Reference drawing (Fig.No.) | C3 | | C4 | | | | | | | | |
| Screw tightening torque | I | | | | | | | | | | |

<CAMERA AND BOARD ASSEMBLY>

| Symbol No. | [1] | | [2] | [3] | | | | [4] | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Removing order of screw | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Place to stick screw | | | | | | | | | | |
| Reference drawing (Fig.No.) | D1 | | D2 | D3 | | | | | | |
| Screw tightening torque | I | | | III | | I | | IV | | |

<VF ASSEMBLY>

| Symbol No. | [8] | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Removing order of screw | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| Place to stick screw | | | | | * | * | | | | | | | | | |
| Reference drawing (Fig.No.) | 2-4-1 | | | | | | | | | | | | | | |
| Screw tightening torque | IV | | | | | | | | | | | | | | |

<MONITOR ASSEMBLY>

| Symbol No. | [10] | | | | |
|---|---|---|---|---|---|
| Removing order of screw | 1 | 2 | 3 | 4 | 5 |
| Place to stick screw | | | | | |
| Reference drawing (Fig.No.) | 2-5-1,2 | | | | |
| Screw tightening torque | III | | V | | |

<OP BLOCK ASSEMBLY>

| Symbol No. | [2]/[5] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Removing order of screw | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Place to stick screw | | | | | | | | | | | |
| Reference drawing (Fig.No.) | 2-6-1 | | | | | | | | | | |
| Screw tightening torque | VI | | IV | | | | | | | | |

<NOTE>

·* : Don't reuse the screw, because screw lock bond was applied to them.

·Pay careful attention to tightening torque for each screw.

I : 0.088N·m (0.9kgf·cm) II : 0.147N·m (1.5kgf·cm) III : 0.069N·m (0.7kgf·cm)

IV : 0.078N·m (0.8kgf·cm) V : 0.098N·m (1.0kgf·cm) VI : 0.118N·m (1.2kgf·cm)

## 2.8 TAKE OUT CASSETTE TAPE

**NOTE :**

The following procedure describes a simplified method of ejecting the cassette tape in case it is not possible to eject it, due to an electrical failure.

Be careful not to damage any of the parts or the tape when performing repairs or maintenance work.

(1) Remove the Power Unit (battery, DC code, etc.) from the set.

(2) Open the CASSETTE COVER.

(3) Attach a piece of PVC TAPE at the front of the CASSETTE HOUSING ASSEMBLY.

**NOTE:**

This helps prevent the tape from being damaged when the CASSETTE HOUSING ASSEMBLY is moved upward at the unloading end.

(4) Apply DC 3V to the electrode on the top surface of the LOADING MOTOR ASSEMBLY to set the MECHANISM ASSEMBLY to the EJECT mode.
Unloading end is EJECT mode.

(5) If there is any slack tape in the tape transport system, wind it inside the DVC CASSETTE TAPE by turning the REEL DISK ASSEMBLY (SUP) from the backside of the SLIDE DECK ASSEMBLY.

(6) Peel off the PVC TAPE and take out the DVC CASSETTE TAPE from the CASSETTE HOUSING ASSEMBLY.

**NOTE:**

Make sure that grease or a similar substance is not attached to the surface of the tape.

Similarly, also make sure that grease or a similar substance is not attached on the MECHANISM ASSEMBLY.

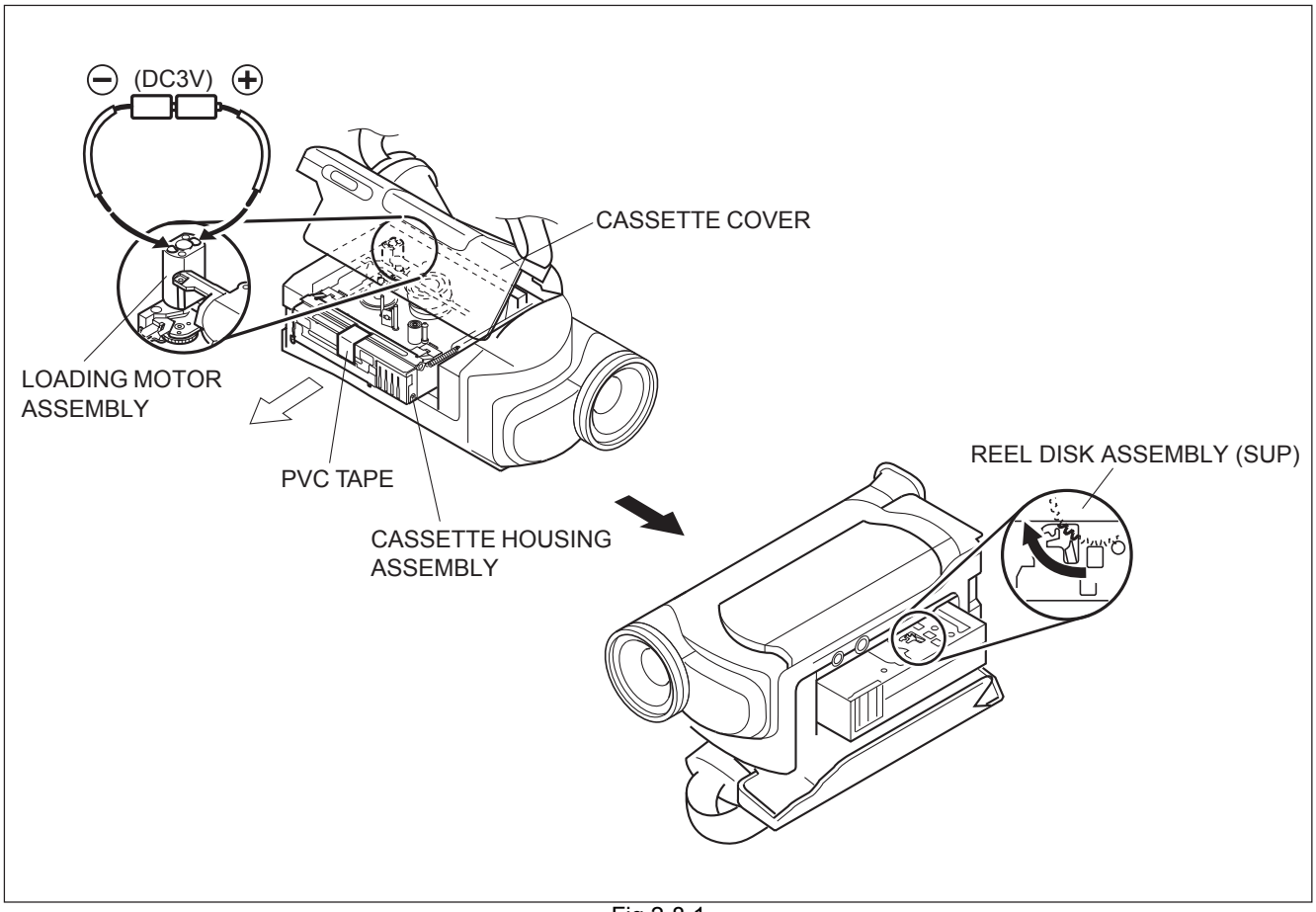


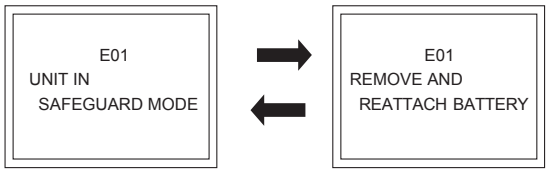

Fig.2-8-1

## 2.9 EMERGENCY DISPLAY

Whenever some abnormal signal is input to the syscon CPU, an error number (E01, as an example) is displayed on the LCD monitor or (in the electronic view finder).
In every error status, such the message as shown below alter nately appear over and over.

- In an emergency mode, all operations except turning on/off the POWER switch are ineffectual.

**Example (in case of the error number E01):**




| LCD display | Emergency mode | Details | Possible cause |
|---|---|---|---|
| E01 | LOADING | In the case the encoder position is not shifted to the next point though the loading motor has rotated in the loading direction for 4 seconds or more. This error is defined as [E01]. | 1. The mechanism is locked during mode shift.<br>2. The mechanism is locked at the mechanism loading end, because the encoder position is skipped during mechanism mode shift.<br>3. No power is supplied to the loading MDA. |
| E02 | UNLOADING | In the case the encoder position is not shifted to the next point though the loading motor has rotated in the unloading direction for 4 seconds or more. This error is defined as [E02]. | 1. The mechanism is locked during mode shift.<br>2. The mechanism is locked at the mechanism loading end, because the encoder position is skipped during mechanism mode shift. |
| E03 | TU & SUP REEL FG | In the case no REEL FG is produced for 4 seconds or more in the capstan rotation mode after loading was complete, the mechanism mode is shifted to STOP with the pinch roller set off. This error is defined as [E03].<br>However, no REEL EMG is detected in the SLW/STILL mode. | 1. The idler gear does not engage with the reel disk well.<br>2. Though the idler gear and reel disk are engaged with each other, the tape is not wound because of overload to the mechanism.<br>3. No FG pulse is output from the reel sensor.<br>4. No power is supplied to the reel sensor.<br>5. Tape transport operation takes place with a cassette having no tape inside.<br>6. The tape slackens and no pulse is produced until the slack is taken up and the tape comes into the normal status. |
| E04 | DRUM FG | In the case there is no DRUM FG input in the drum rotation mode for 4 seconds or more. This error is defined as [E04], and the mechanism mode is shifted to STOP with the pinch roller set off. | 1. The drum cannot be started or drum rotation is stopped because tape transport load is too high.<br>1) Tape tension is extremely high.<br>2) The tape is damaged or soiled with grease, etc.<br>2. The DRUM FG signal is not received by the syscon CPU.<br>1) Disconnection in the middle of the signal line.<br>2) Failure of the DRUM FG pulse generator (hall element).<br>3. No drum control voltage is supplied to the MDA.<br>4. No power is supplied to the DRUM MDA. |
| E05 | - | - | - |
| E06 | CAPSTAN FG | In the case no CAPSTAN FG is produced in the capstan rotation mode for 2 seconds or more. This error is defined as [E06], and the mechanism mode is shifted to STOP with the pinch roller set off.<br>However, no CAPSTAN EMG is detected in the STILL/FF/REW mode. | 1. The CAPSTAN FG signal is not received by the syscon CPU.<br>1) Disconnection in the middle of the signal line.<br>2) Failure of the CAPSTAN FG pulse generator (MR element).<br>2. No capstan control voltage is supplied to the MDA.<br>4. The capstan cannot be started or capstan rotation is stopped because tape transport load is too high.<br>1) Tape tension is extremely high. (Mechanical locking)<br>2) The tape is damaged or soiled with grease, etc. (Tape tangling occurs, etc.) |

Fig.2-9-1

# SECTION 3
# ADJUSTMENT

## 3.1 PREPARATION

(1) Precaution

This model does not contain adjustment controls (VR). General deck system, camera system and monitor system adjustment are not required. However, if MAIN board need replacement, please use original EEP ROM on to new board. Then adjustment are not required. And if parts such as the following need replacement, special computerized adjustment are required. 3.5.1 Electrical adjustment with personal computer is setup and it adjusts using a service support system. Please contact to JVC Service for detail information.

- OP BLOCK ASSEMBLY
- EEP ROM (IC1005 of MAIN board)
- MONITOR / VF ASSEMBLY

In the event of malfunction with electrical circuits, troubleshooting with the aid of proper test instruments most be done first, and then commence necessary repair, replacement and adjustment, etc.

a) In case of wiring to chip test points for measurement, use IC clips, etc. to avoid any stress.
b) Since connectors are fragile, carefully handle them in disconnecting and connecting.
c) Short circuit between operation unit and DECK chassis.

(2) Required test equipment

a) Color TV monitor.
b) AC power adapter
c) Oscilloscope (dual-trace type, observable 100 MHz or higher frequency)
   - It is recommended to use one observable 300 MHz or higher frequency.
d) Digital voltmeter
e) Frequency counter (with threshold level adjuster)
f) Personal computer

## 3.2 TOOLS REQUIRED FOR ADJUSTMENT

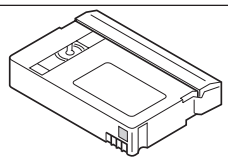
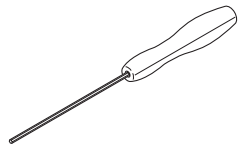
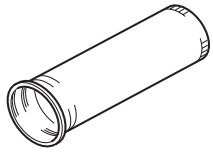
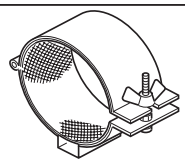
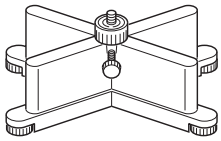
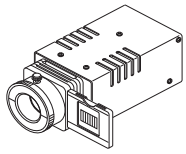
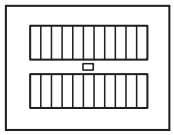
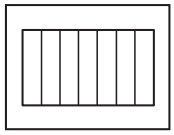
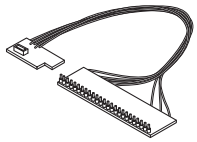
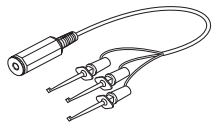
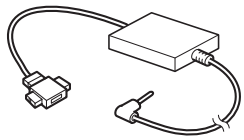
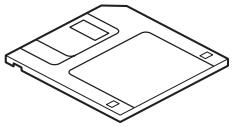
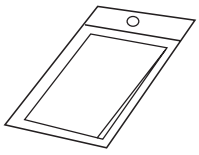
| | |
|---|---|
| 1 Alignment tape MC-2 | 2 Guide driver (Hexagonal) D-770-1.27 |
|  |  |
| 3 INF adjustment lens YTU92001B | 4 INF lens holder YTU94087 |
|  |  |
| 5 Camera stand YTU93079 | 6 Light box assembly YTU93096A |
|  |  |
| 7 Gray scale chart YTU94133A | 8 Color bar chart YTU94133C |
|  |  |
| 9 Jig connector cable YTU93106B | 10 Extension connector YTU94145C-30 |
|  | |
| 11 Communication cable YTU93107A | 12 PC cable QAM0099-005 |
|  |  |
| 13 Service support system YTU94057-67 | 14 Cleaning cloth KSMM-01 |
|  |  |

Fig.3-2-1

**1. Alignment tape**

To be used for check and adjustment of interchangeability of the mechanism.

**2. Guide driver (Hexagonal)**

To be used to turn the guide roller to adjustment of the linarity of playback envelope.

**3.INF adjustment lens**

To be used for adjustment of the camera system. For the usage of the INF adjustment lens, refer to the Service Bulletin No. YA-SB-10035.

**4.INF lens holder**

To be used together with the Camera stand (6) for operating the Videocamera in the stripped-down condition such as the status without the exterior parts or for using commodities that are not yet conformable to the interchangeable ring. For the usage of the INF lens holder, refer to the Service Bulletin No. YA-SB-10035.

**5.Camera stand**

To be used together with the INF adjustment lens holder. For the usage of the Camera stand, refer to the Service Bulletin No. YA-SB-10035.

**6.Light box assembly**

To be used for adjustment of the camera system. For the usage of the Light box assembly, refer to the Service Bulletin No. YA-SB-10035.

**7.Gray scale chart**

To be used for adjustment of the camera system. For the usage of the INF adjustment lens, refer to the Service Bulletin No. YA-SB-10035.

**8.Color bar chart**

To be used for adjustment of the camera system. For the usage of the INF adjustment lens, refer to the Service Bulletin No. YA-SB-10035.

**9. Jig connector cable**

Connected to CN105 of the main board and used for electrical adjustment, etc.

**NOTE:**

Only some of the connectors in the JIG connector (YTU93106B) are soldered to wires.

It is desirable that you solder all the connectors to wires before using the JIG connector (YTU93106B), but you should solder only the connectors shown in the following JIG connector schematic diagram to wires because they are used in this model.

As for the details, see 3.3 JIG CONNECTOR CABLE.

**10.Extension connector**

Connect this extension connector to the connector of the jig connector cable for extending the cable connector.

**NOTE:**

removing the cover (for jig), use this extension connector triple for connecting the jig connector cable.

**11.Communication Cable**

Connect the Communication cable between the PC cable and Jig connector cable when performing a PC adjustment.

**12.PC cable**

To be used to connect the Videocamera and a personal computer with each other when a personal computer issued for adjustment.

**13.Service support system**

To be used for adjustment with a personal computer. Software can be downloaded also from JS-net.

**14.Cleaning cloth**

Recommended the Cleaning cloth to wipe down the video heads, mechanism (tape transport system), optical lens surface.

### 3.3 JIG CONNECTOR CABLE

Nine wires have been soldered to the JIG CONNECTOR CABLE (YTU93106B).
Solder another nine wires to the JIG CONNECTOR CABLE (YTU93106B) to use in this set.
See the JIG CONNECTOR SCHEMATIC DIAGRAM and JIG CONNECTOR BOARD to solder the nine wires.

#### 3.3.1 JIG CONNECTOR SCHEMATIC DIAGRAM

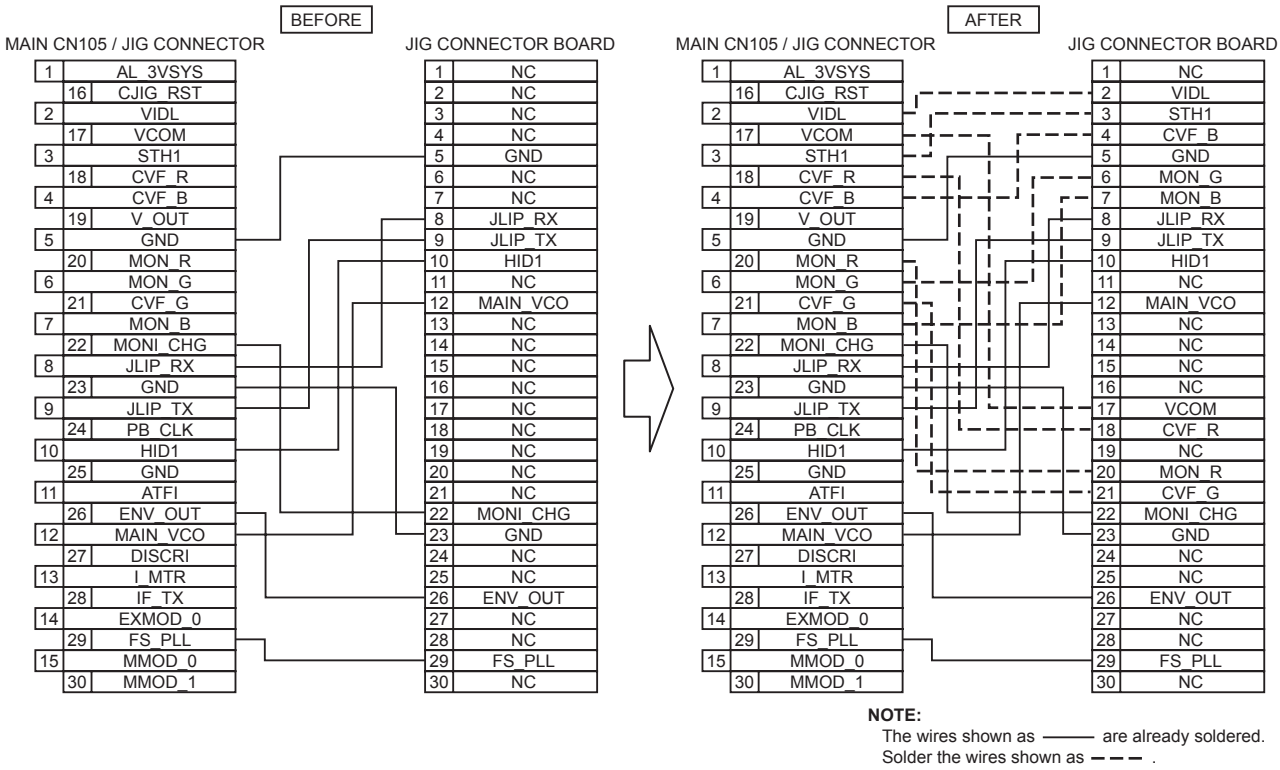



Fig.3-3-1

#### 3.3.2 JIG CONNECTOR BOARD

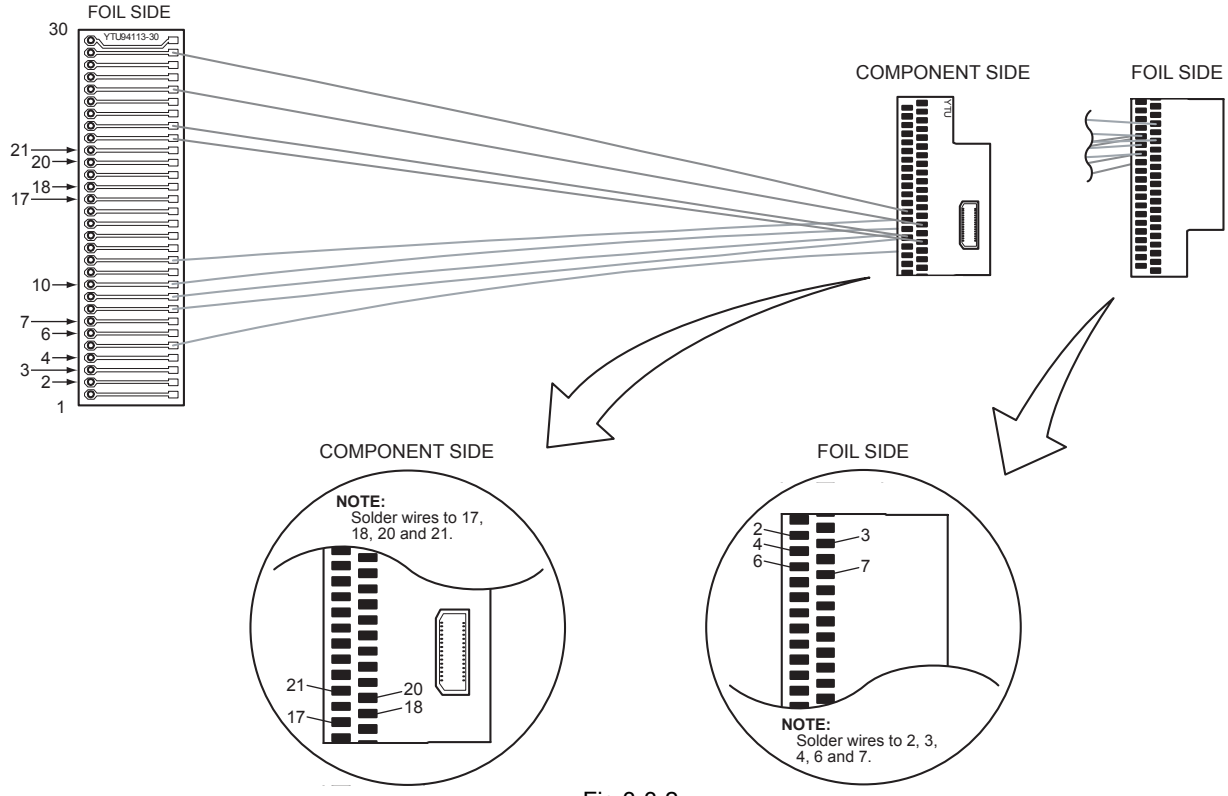



Fig.3-3-2

### 3.4 MECHANISM COMPATIBILITY ADJUSTMENT

#### 3.4.1 Tape pattern check

(1) Connect the JIG CONNECTOR CABLE to the set.
As for the connection procedure, JIG CONNECTOR BOARD and see 3.5 ELECTRICAL ADJUSTMENT.
(2) Remove the COVER(ADJUST)
(3) Play back the compatibility adjustment tape.
(4) While triggering the HID1, observe the waveform of ENV_OUT.
(5) Confirm that the waveform is free from remarkable level-down, and entirely parallel and straight.
(6) In case any level-down is observed on the left hand side, straighten the level by turning the GUIDE ROLLER (SUP) of the POLE BASE ASSEMBLY.
In case any level-down is observed on the right hand side, however, straighten the level by turning the GUIDE ROLLER(TU) of the POLE BASE ASSEMBLY.
(7) After adjustment, try the unloading motion once, and confirm that the waveform is flat (straight) when the tape has been played back again.
Moreover, perform readjustment as required.
(8) When the recording has been played back again, play back the self-recording to confirm that the waveform is flat.

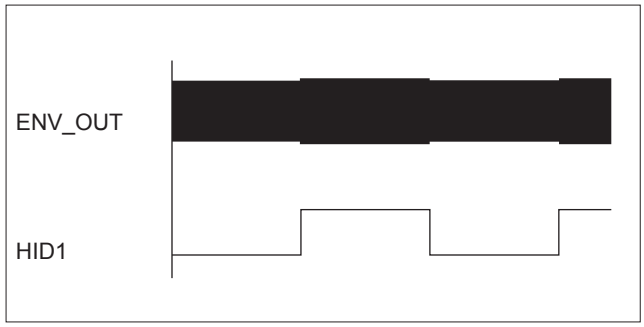



Fig.3-4-1

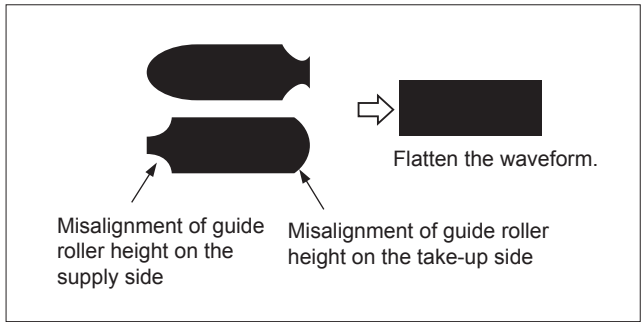

Flatten the waveform.
Misalignment of guide roller height on the supply side
Misalignment of guide roller height on the take-up side

Fig.3-4-2

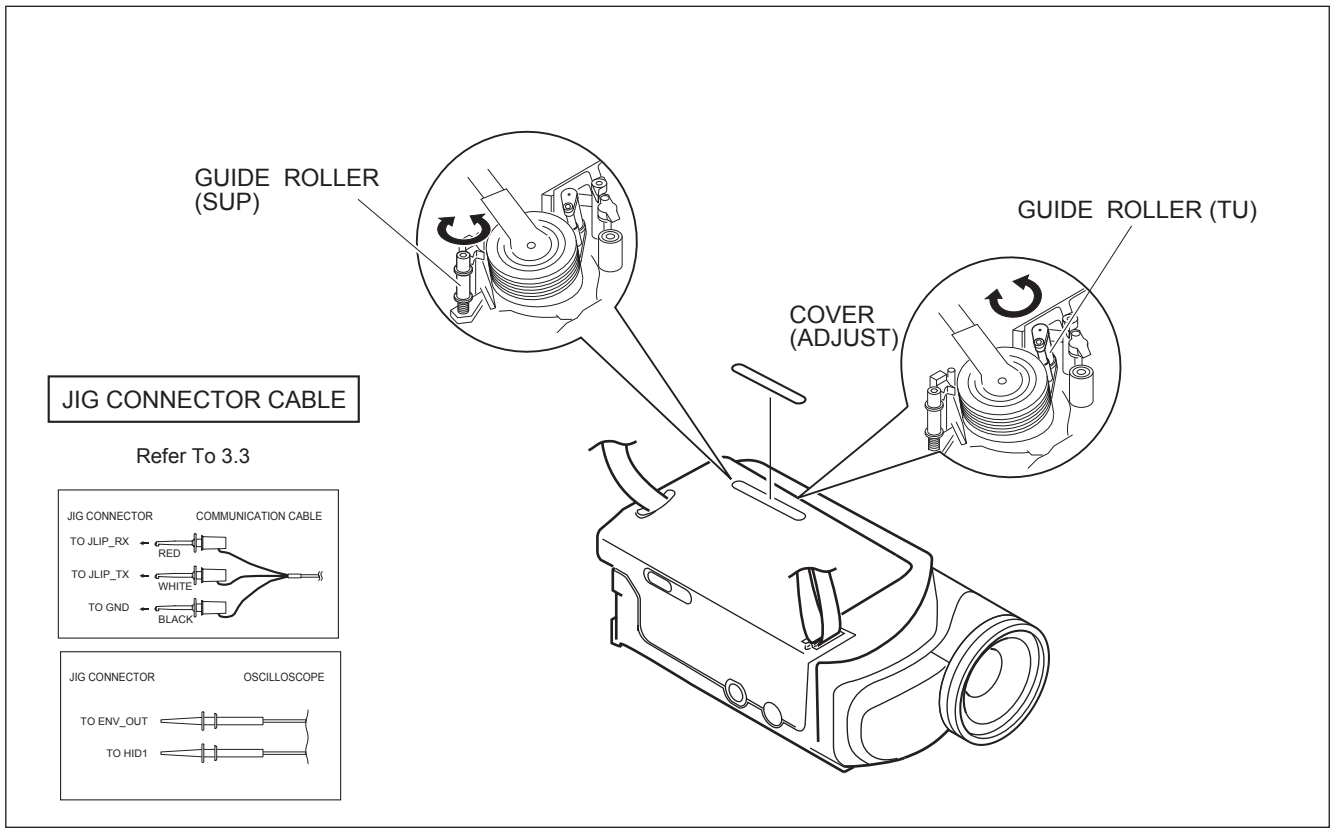



Fig.3-4-3

### 3.5 ELECTRICAL ADJUSTMENT

#### 3.5.1 Electrical adjustment with personal computer

- Electrical adjustmentis performed by using PERSONAL COMPUTER. As for the connection of cables, see Fig. 3-5-1. Read README.TXT file to use the software for SERVICE SUPPORT SYSTEM properly.
- Remove the COVER (JIG) to perform adjustment.

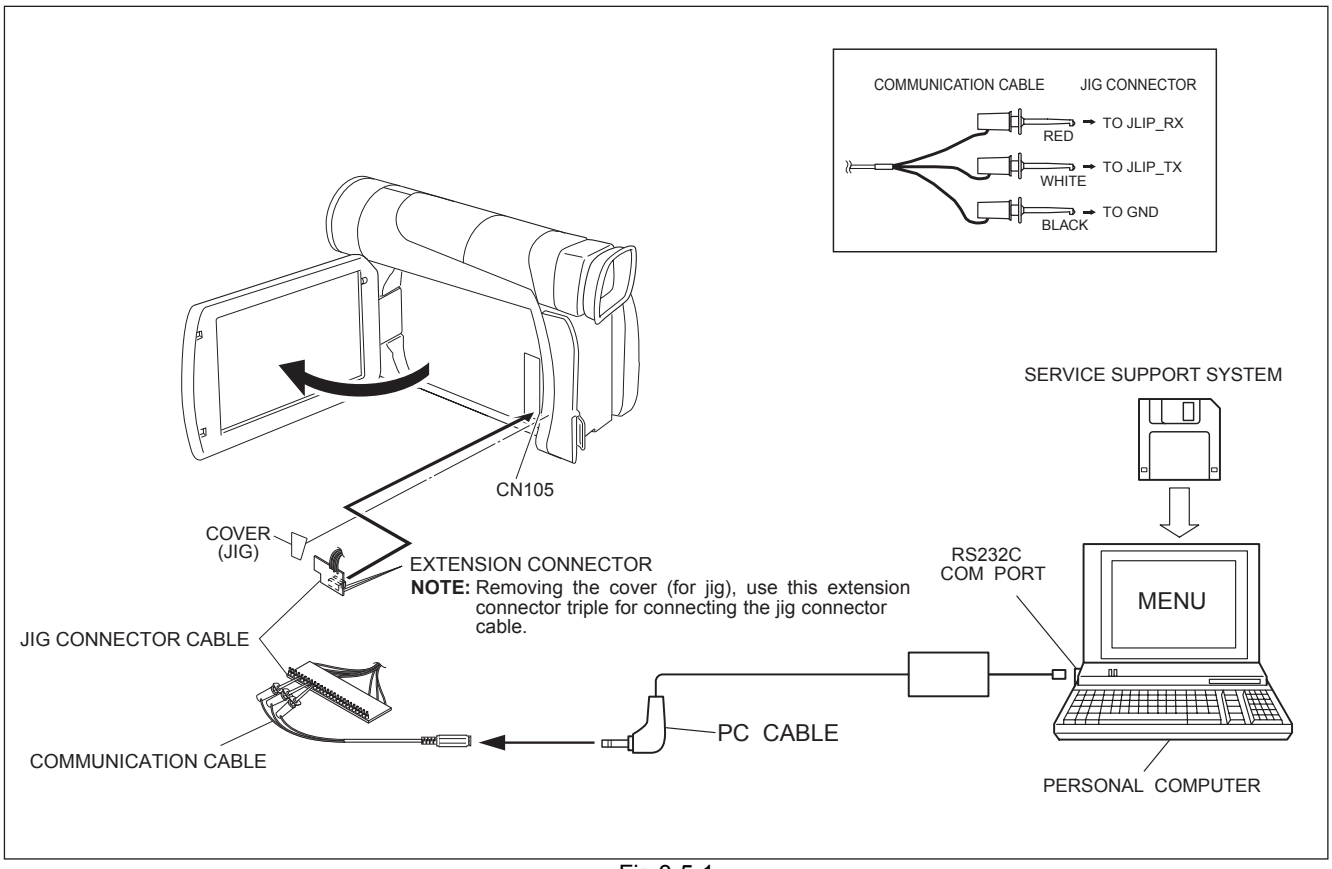



Fig.3-5-1

# CHARTS AND DIAGRAMS

## NOTES OF SCHEMATIC DIAGRAM

**Safety precautions**
**The Components identified by the symbol ⚠ are critical for safety. For continued safety, replace safety critical components only with manufacturer's recommended parts.**

**1. Units of components on the schematic diagram**

Unless otherwise specified.

1) All resistance values are in ohm. 1/6 W, 1/8 W (refer to parts list).
   Chip resistors are 1/16 W.
   K: KΩ (1000Ω), M: MΩ (1000KΩ)
2) All capacitance values are in µF, (P: PF).
3) All inductance values are in µH, (m: mH).
4) All diodes are 1SS133, MA165 or 1N4148M (refer to parts list).

**Note: The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.**

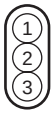
**2. Indications of control voltage**

AUX : Active at high.

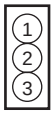
$\overline{\text{AUX}}$ or AUX(L) : Active at low.

**3. Interpreting Connector indications**

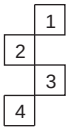
Removable connector



Wire soldered directly on board



Non-removable Board connector



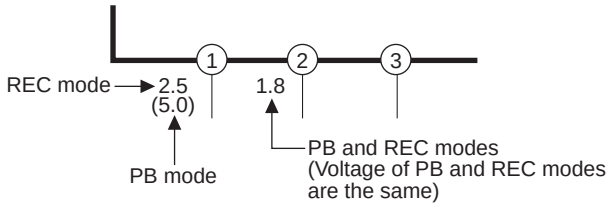
Board to Board

Connected pattern on board
The arrows indicate signal path

**Note: For the destination of each signal and further line connections that are cut off from the diagram, refer to "BOARD INTERCONNECTIONS"**

**4. Voltage measurement**

1) Regulator (DC/DC CONV) circuits
   REC : Colour bar signal.
   PB : Alignment tape (Colour bar).
   — : Unmeasurable or unnecessary to measure.
4) Indication on schematic diagram
   Voltage Indications for REC and PB mode on the schematic diagram are as shown below.

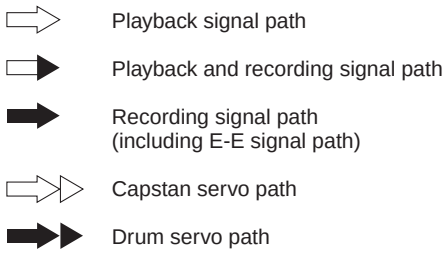



**Note: If the voltages are not indicated on the schematic diagram, refer to the voltage charts.**

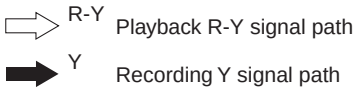
**5. Signal path Symbols**

The arrows indicate the signal path as follows.

**NOTE : The arrow is DVC unique object.**

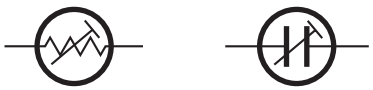



(Example)




**6. Indication of the parts for adjustments**

The parts for the adjustments are surrounded with the circle as shown below.



**7. Indication of the parts not mounted on the circuit board**

"OPEN" is indicated by the parts not mounted on the circuit board.

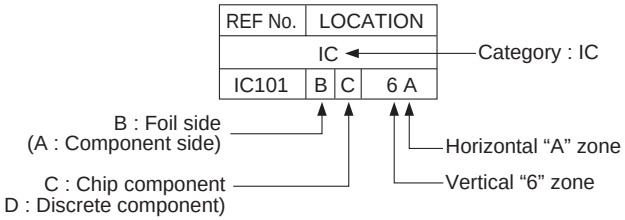
## CIRCUIT BOARD NOTES

**1. Foil and Component sides**

1) Foil side (B side) :
   Parts on the foil side seen from foil face (pattern face) are indicated.
2) Component side (A side) :
   Parts on the component side seen from component face (parts face) indicated.

**2. Parts location guides**

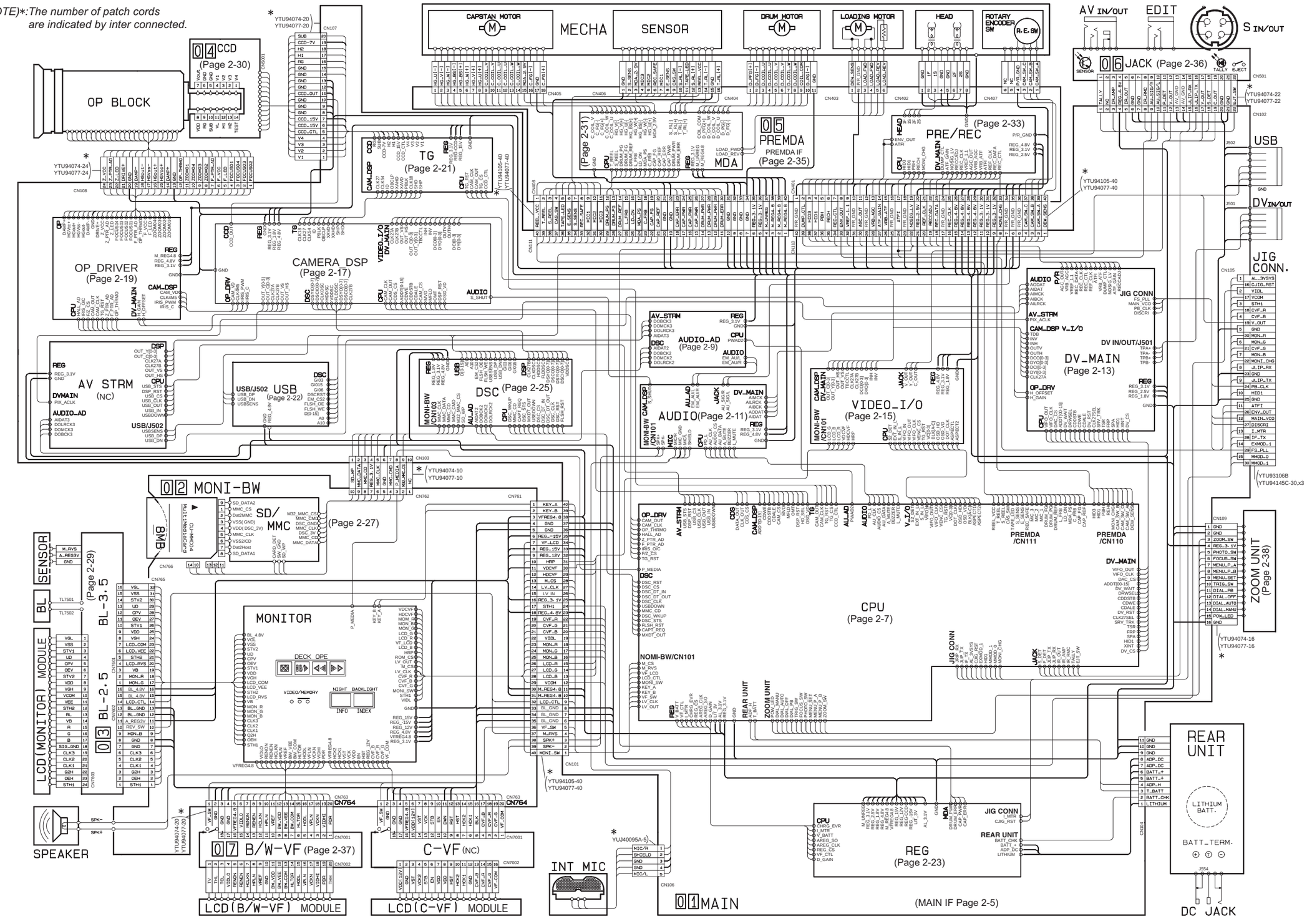
Parts location are indicated by guide scale on the circuit board.




**Note: For general information in service manual, please refer to the Service Manual of GENERAL INFORMATION Edition 4 No. 82054D (January 1994).**

## ■ BOARD INTERCONNECTIONS

*NOTE)*:The number of patch cords are indicated by inter connected.*




y10331001a_rev0.1

# ■ MAIN IF SCHEMATIC DIAGRAM

TO OP BLOCK

CN108
QGF0503C1-24V
STRAIGHT

| 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z_VCC | Z_PTR_AD | Z_LED | DRIVE+ | GND | DAMP- | HGout- | HGVss- | HGout+ | HGVcc+ | DAMP+ | GND | OP_THRMO | ZOOM01 | ZOOM04 | ZOOM03 | ZOOM02 | F_PTR_AD | F_VCC | F_LED | FOCUS01 | FOCUS04 | FOCUS03 | FOCUS02 |

TO CCD CN5001

CN107
QGF0503C1-20X
STRAIGHT

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| V1 | V2 | V3 | V4 | CCD_CTL | CCD_15V | CCD_15V | GND | GND | GND | CCD_OUT | GND | GND | GND | GND | RG | H1 | H2 | CCD_-7V | SUB |

TO ZOOM UNIT

CN109
QGF0503F1-16X
LOWER CONTACT

| 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GND | PWR_LED | P-SW_MANU | P-SW_AUTO | P-SW_OFF | P-SW_PB | P-TRIG_SW | MENU_SET | MENU_P_B | MENU_P_A | FOCUS_SW | P-PHOTO_SW | REG_3.1V | ZOOM_SW | GND | GND |

TO REAR UNIT

CN104
QGA1002C1-11X
W to B

| 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|---|---|---|---|---|
| GND | GND | GND | ADP_DC | ADP_DC | BATT_+ | BATT_+ | ADP_H | T_BATT | BATT_CHK | LITHIUM |

TO JACK CN501

CN102
QGF0505F1-22X
LOWER CONTACT

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TALLY | NC | IR_AMP | REG_4.8V | IR_OUT | GND | GND | IR_RMC | AU_SIG/R | AU_SIG/L | P_DET | V_OUT | GND | GND | JLIP_RX | JLIP_TX | Y_OUT | S_DET | C_OUT | GND | GND | EJT_SW |

470k R2001 … R2012

DIAL_MANU — Q2001 UMX1N-W — R2013 # — P-SW_MANU
DIAL_AUTO — Q2002 UMX1N-W — R2014 # — P-SW_AUTO
DIAL_OFF — Q2003 UMX1N-W — R2015 # — P-SW_OFF
DIAL_PB — Q2004 UMX1N-W — R2016 # — P-SW_PB
TRIG_SW — Q2005 UMX1N-W — R2017 # — P-TRIG_SW
PHOTO_SW — Q2006 UMX1N-W — R2018 # — P-PHOTO_SW

AL_3VSYS

0 1 MAIN(MAIN IF)

USB

J502
QNZ0497-001

R8716 # — GND
L8703 # — USB_DP, USB_DN
R8717 # — USBSENS, GND
D8703 #
D8702 #
C8717 #
C8718 #

DV

J501
NNZ0041-001X

| GND | TPA+ | TPA− | TPB+ | TPB− | GND |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |

TO SD

# CN103
QGF0503F3-10X
UNDER CONTACT

| EL_CTL | M32_MMC_CS | P_MEDIA | MMC_CMD | GND | MMC_CLK | REG_3.1V | MMC_CD | MMC_DATA | SD_WP |
|---|---|---|---|---|---|---|---|---|---|
| 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

TO MIC

CN106
QGA1201C2-05X
W to B

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| MIC/R | SHIELD | GND | GND | MIC/L |

TP110

TO PREMDA CN401

CN110
QGF0528F1-40X
UNDER CONTACT

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DEW_SENS | CAM_SW_A | CAM_SW_B | CAM_SW_C | GND | GND | GND | MONI_CHG | REG_3.1V | REG_3.1V | REG_3.1V | REG_4.8V | REG_4.8V | REG_4.8V | REG_4.8V | REC_CLK | GND | REC_DATA | RECCADJ | REF_CLK | REG_2.5V | NOSIG_LV | GND | ATFI | GND | VRB_ATF | ATF_GAIN | VRB_AGC | GND | AGC_OUT | GND | VREF_1.1 | ENV_OUT | REC_CTL | RECH | PBH | HID1 | HID3 | DUMP_CTL | GND |

TO PREMDA CN408

CN111
QGF0528F1-40X
UNDER CONTACT

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| M_REG4.8 | M_REG4.8 | M_REG4.8 | M_UNREG | REG_3.1V | REG_3.1V | GND | GND | GND | GND | DRUM_ERR | DRUM_PWR | DRUM_PWR | DRUM_PWR | DRUM_PWR | CAP_PWR | CAP_PWR | CAP_PWR | CAP_PWR | CAP_ERR | GND | GND | CAP_REF | CAP_FG | C_FRB | MDA_PS | LD_ON | L_FRB | DRUM_REF | DRUM_FG | DRUM_PG | MIC3 | MIC2 | MIC1 | REC_SAFE | S_SENS | E_SENS | TAPE_LED | CAS_SW | S_REEL | T_REEL | REEL_VCC |

JIG CONN

CN105
QGB0509M1-30X
B to B

| 1 | 16 | 2 | 17 | 3 | 18 | 4 | 19 | 5 | 20 | 6 | 21 | 7 | 22 | 8 | 23 | 9 | 24 | 10 | 25 | 11 | 26 | 12 | 27 | 13 | 28 | 14 | 29 | 15 | 30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AL_3VSYS | CJIG_RST | VIDL | VCOM | STH1 | CVF_R | CVF_B | V_OUT | GND | MON_R | MON_G | CVF_G | MON_B | MONI_CHG | JLIP_RX | GND | JLIP_TX | PB_CLK | HID1 | GND | ATFI | ENV_OUT | MAIN_VCO | DISCRI | I_MTR | IF_TX | EXMOD_1 | FS_PLL | MMOD_0 | MMOD_1 |

TO MONI-BW CN761

CN101
QGF0528F1-40X
UNDER CONTACT

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONI_SW | SPK- | SPK+ | M_RVS | VF_SW | GND | GND | GND | LCD_CTL | M_REG4.8 | M_REG4.8 | VCOM | LCD_B | LCD_G | LCD_R | MON_B | MON_G | MON_R | VIDL | CVF_B | CVF_G | CVF_R | REG_4.8V | STH1 | REG_3.1V | LV_OUT | LV_CLK | M_CS | HDCVF | VDCVF | HRP | REG_12V | REG_15V | VF_LCD | REG_-15V | GND | GND | VREG4.8 | KEY_B | KEY_A |

# EXCHANGE PARTS LIST

| | R8716 | R8717 | D8702 | D8703 | CN103 | J502 |
|---|---|---|---|---|---|---|
| DSC DSC&Web CAM | 0Ω | 0Ω | ※ | ※ | QGF0503 F3-10X | QNZ0497 -001X |
| Web CAM ONLY | 0Ω | 0Ω | EMZ6.8N -X | EMZ6.8N -X | QGF0503 F3-10X | QNZ0497 -001X |
| NO DSC/DSC&Web CAM | ※ | ※ | ※ | ※ | ※ | ※ |

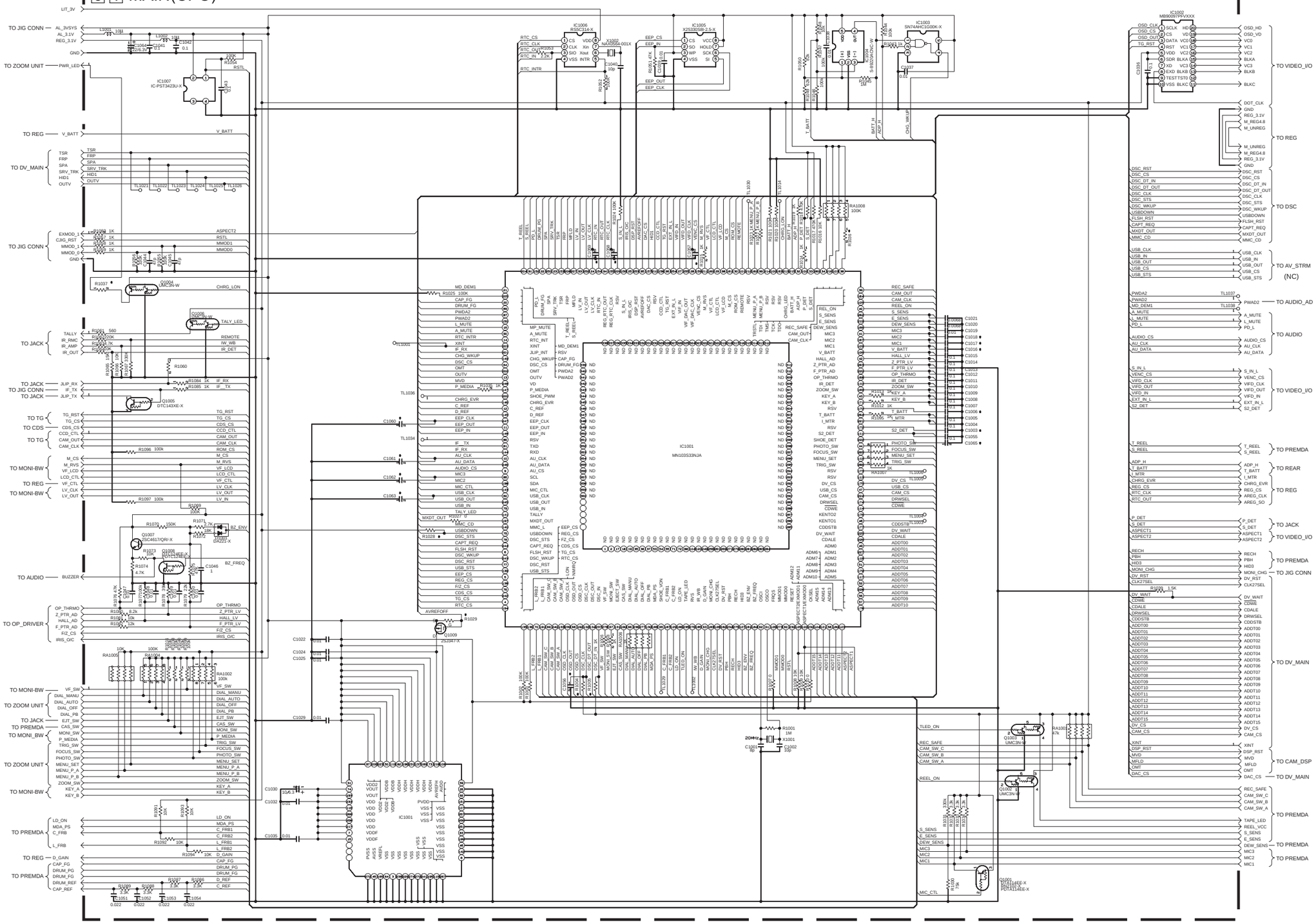
NOTE: The parts with marked (※) is not used.

y20231001a_rev0.1

2-5 2-6

# ■ CPU SCHEMATIC DIAGRAM

## 0 1 MAIN(CPU)




NOTE: The parts with marked (※) is not used.

p10332001a_rev0.1

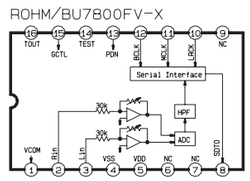
2-7 2-8

## ■ AUDIO_AD SCHEMATIC DIAGRAM

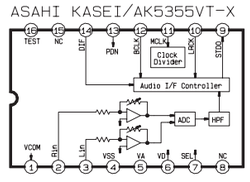
0 1 MAIN(AUDIO_AD)

Fig IC2101

ROHM/BU7800FV-X




ASAHI KASEI/AK5355VT-X




IC2101

(See:Fig IC2101)

PWAD2 TO CPU

DOBCK2
DOMCK2
DOLRCK2
AIDAT2
TO DSC

DOBCK3
DOMCK3
DOLRCK3
AIDAT3
TO AV STRM (NC)

R2111 # R2112 # R2113 # R2114 #

R2107 # R2108 # R2109 # R2110 #

R2105 0Ω R2106 ※

C2112 ※ C2113 ※

TO AUDIO
EM_AU/L
EM_AU/R

R2101 470
R2102 470

L2101 10µ

REG_3.1V

C2108 0.1
C2106 0.0022
C2110 4.7/6.3
C2105 0.0022
C2109 0.1
C2107 10/6.3

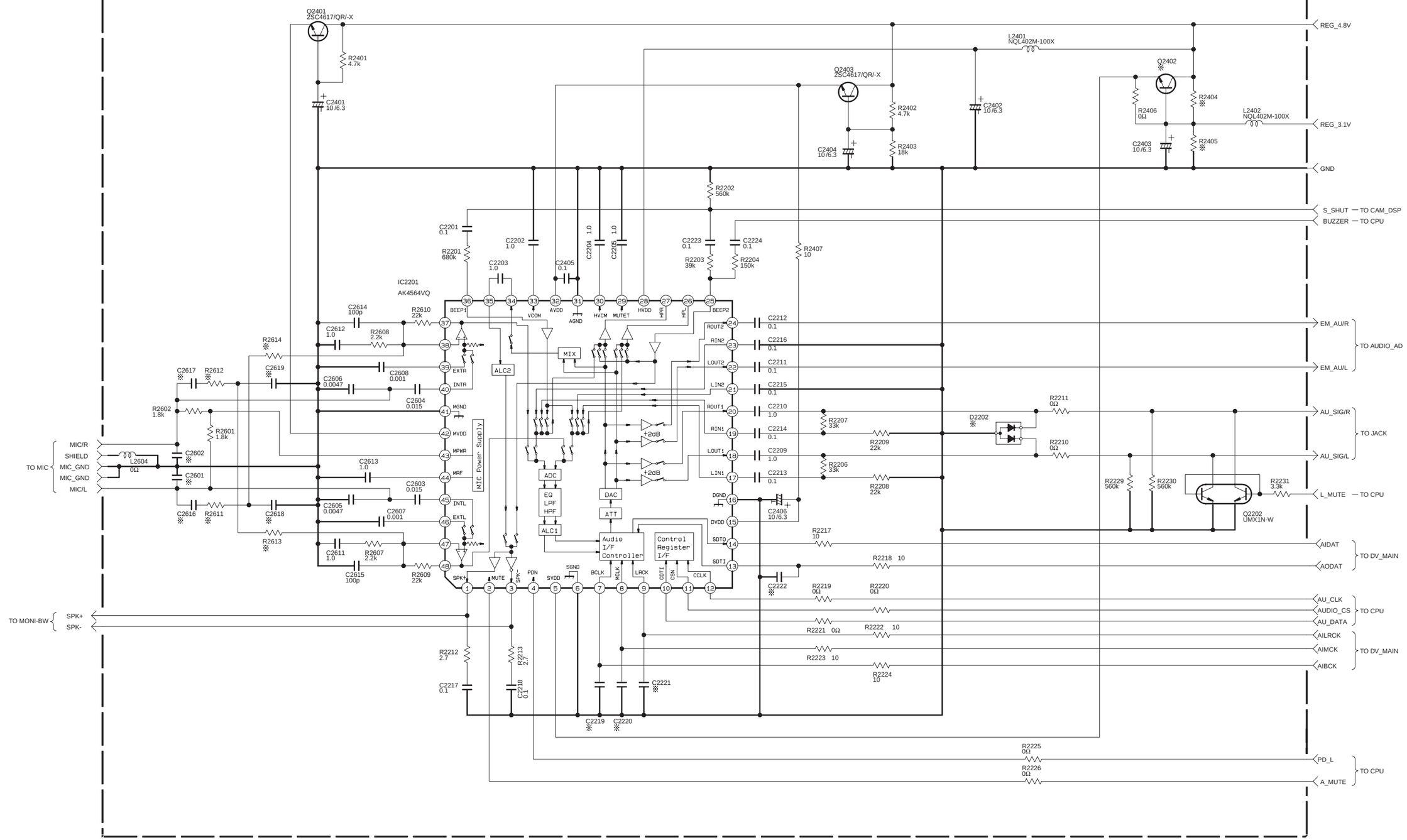
GND

NOTE: The parts with marked (※) is not used.

y30212001a_rev0

## ■ AUDIO SCHEMATIC DIAGRAM

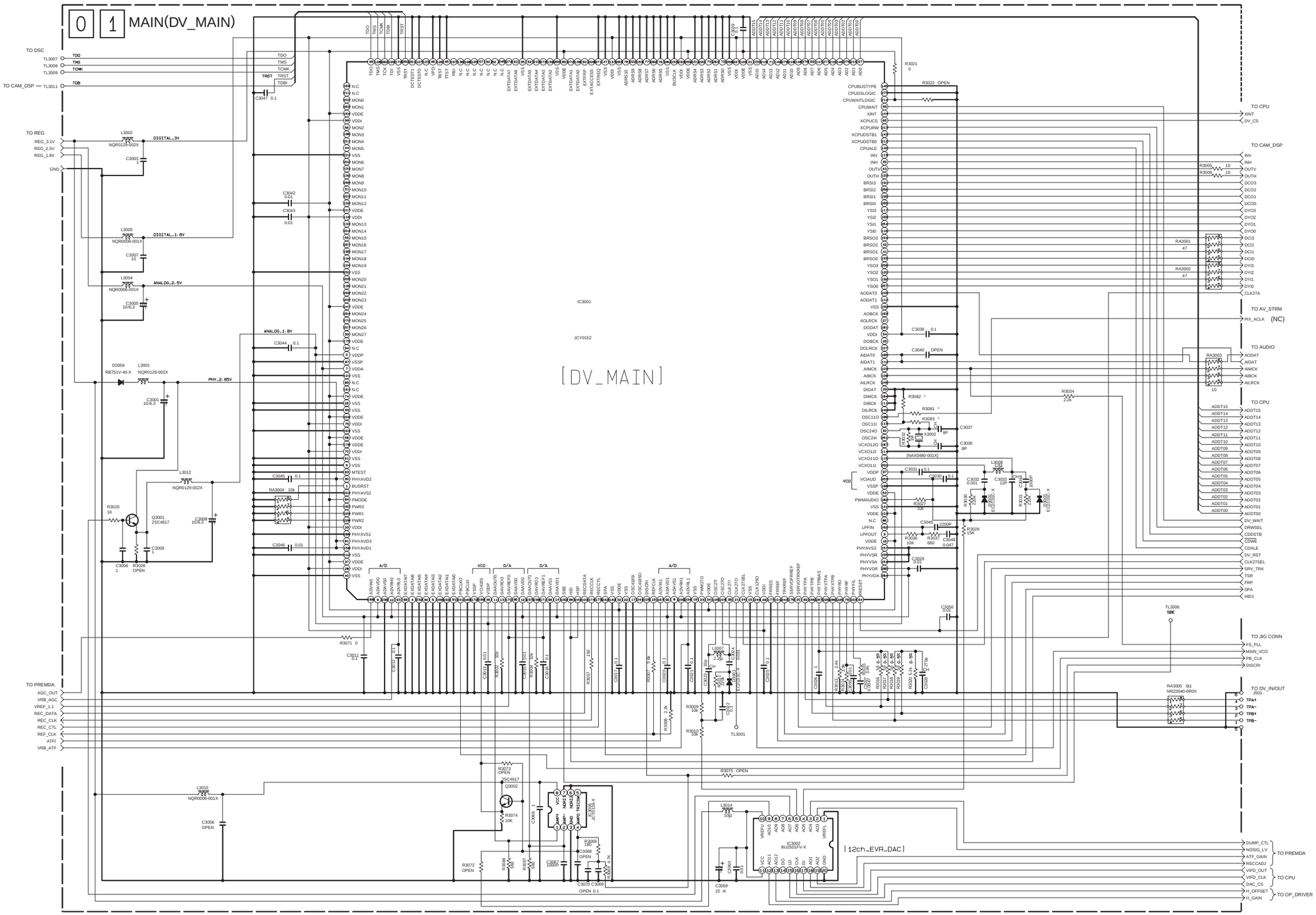
0 1 MAIN(AUDIO)




NOTE: The parts with marked (※) is not used.

p20233001a_rev0.1

# ■ DV_MAIN SCHEMATIC DIAGRAM




DIFFERENT PARTS LIST

| | R3081 | R3082 | R3083 |
|---|---|---|---|
| NON_PIX | OPEN | 0Ω | OPEN |
| PIXELA | 470Ω | OPEN | 0Ω |

NOTE: The parts with marked (*) is not used.

y10333001a_rev0.1

## ■ VIDEO I/O SCHEMATIC DIAGRAM

# 0 1 MAIN (VIDEO I/O)

[Analog video I/O section]

※: EXCHANGE PARTS LIST

| | WITH ANALOG INPUT | WITHOUT ANALOG INPUT |
|---|---|---|
| IC3713, IC3801 | WARE | NO WARE |
| Q3731-Q3735 | WARE | NO WARE |
| L3731, L3732 | WARE | NO WARE |
| R3731-R3748, R3801-R3805 | WARE | NO WARE |
| C3731-C3747, C3805-C3820 | WARE | NO WARE |
| IC3851 | NO WARE | WARE |
| R3851-R3855 | NO WARE | WARE |
| C3851-C3861 | NO WARE | WARE |

NOTE: The parts with marked (※) is not used.

y10334001a_rev0.1

# ■ CAMERA DSP SCHEMATIC DIAGRAM

01 MAIN(CAMERA DSP)

TO TG
CLK18
CLK27
CLK54
ID
PBLK
OBCLP
XAVD
XAHD
SHP
SHD
REG_4.8V

TO CCD
CCD_OUT

TO CPU
CDS_CS
CAM_OUT
CAM_CLK

ADDT15
ADDT14
ADDT13
ADDT12
ADDT11
ADDT10
ADDT09
ADDT08
ADDT07
ADDT06
ADDT05
ADDT04
ADDT03
ADDT02
ADDT01
ADDT00
CDWE
CDDSTB
CDALE
CAM_CS
MVD
MFLD
OMT
DSP_RST

TO OP_DRIVER
IRIS_C
CAM_VD
IRIS_PWM
CLK4M5

TO AUDIO
S_SHUT

TO CPU
OSD_VD

TO VIDEO_I/O
CLK27B
CLK27A

IC4202
MM1613AN-X
IC4201
HD49340ANP-X
[CDS/AGC/AD]
IC4303
IC4301
JCY0200
[CAMERA DSP]
IC4302
R1160N151B-X

TO DSC
TO AV STRM
TO DV_MAIN

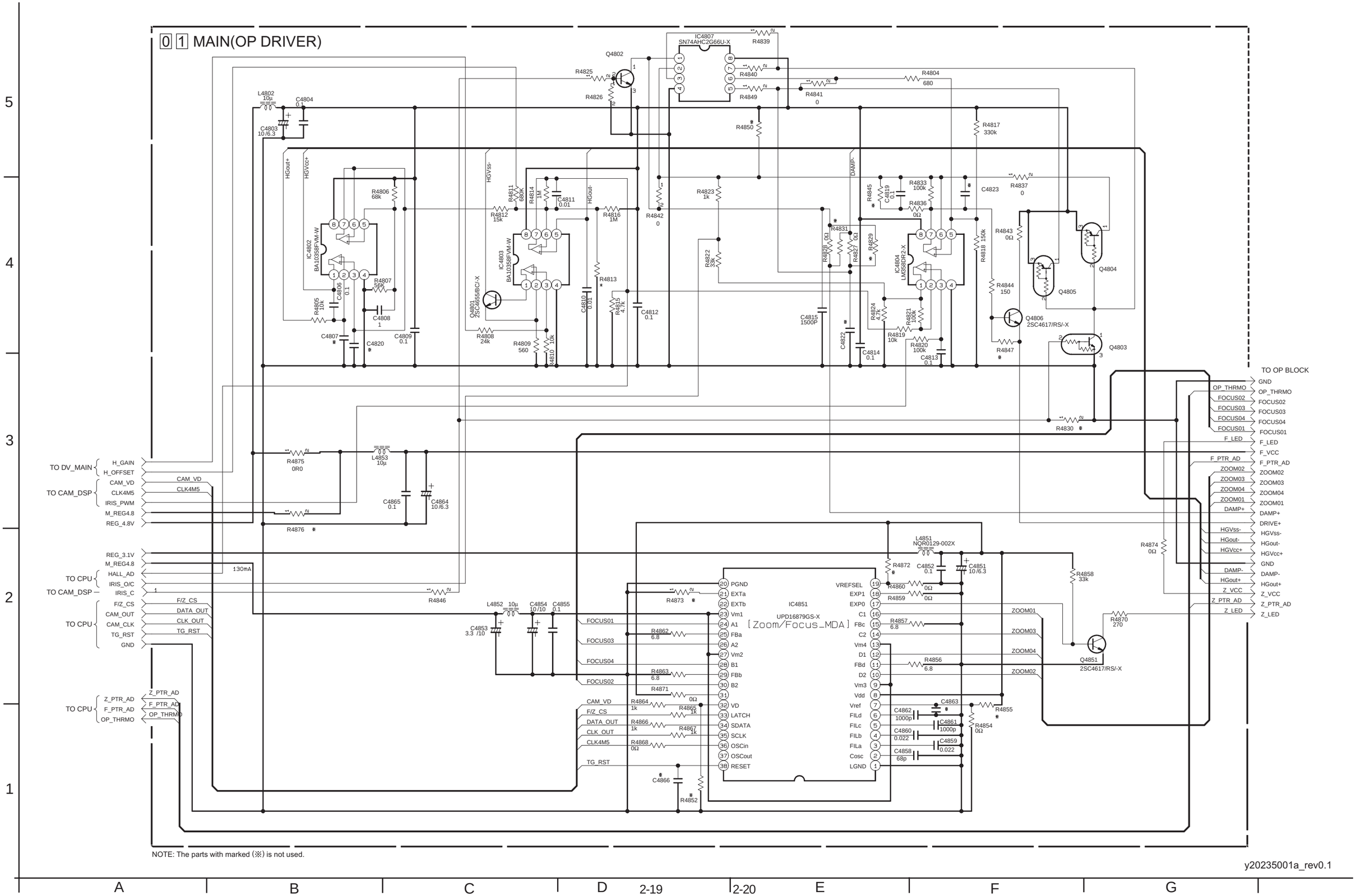
| | R4302 | R4303 |
|---|---|---|
| NTSC | 0Ω | ※ |
| PAL | ※ | 0Ω |

NOTE: The parts with marked (※) is not used.

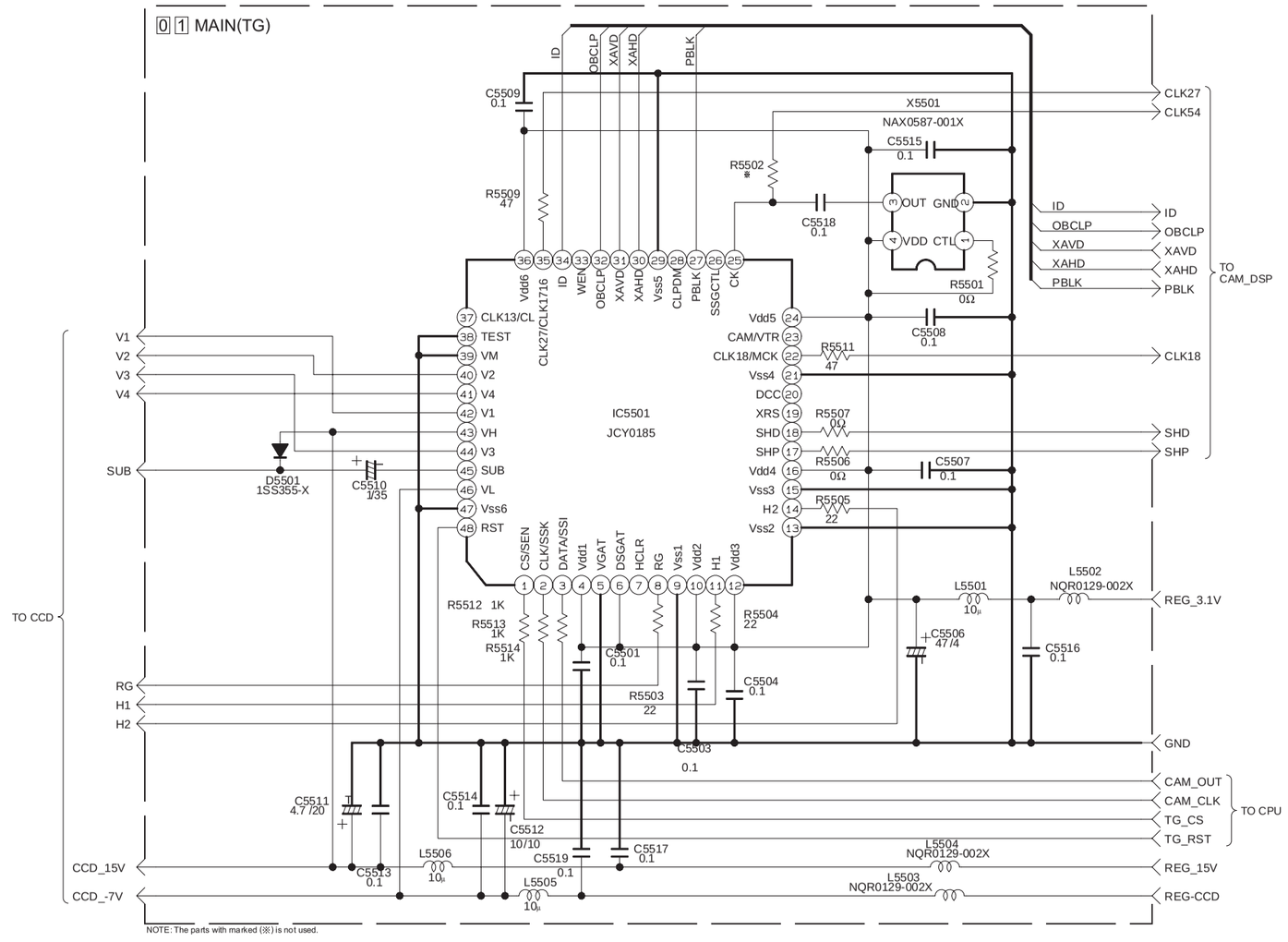
y10335001a_rev0.1

2-17 2-18

## ■ OP DRIVER SCHEMATIC DIAGRAM



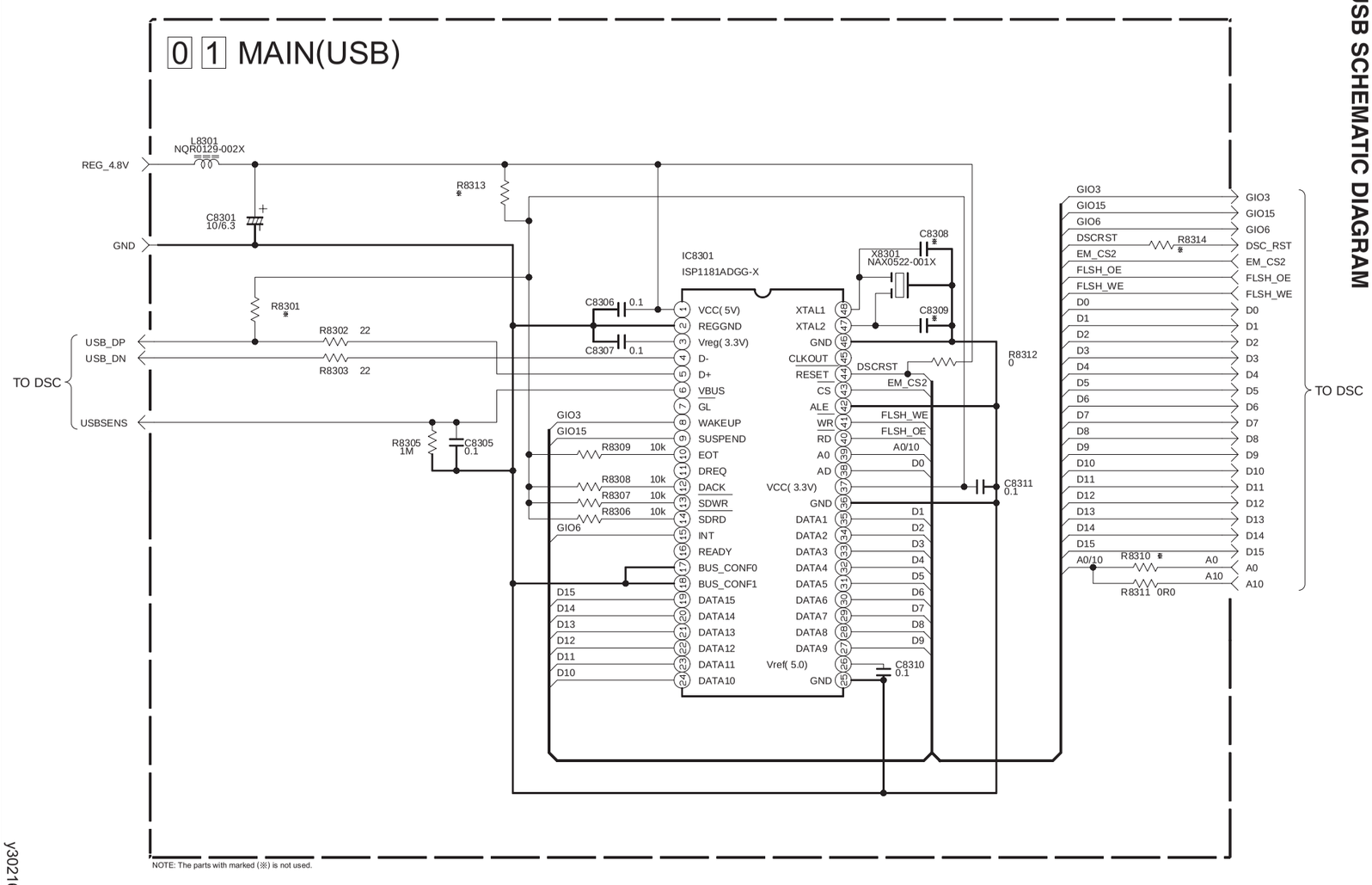
## TG SCHEMATIC DIAGRAM




y30213001a_rev0.1

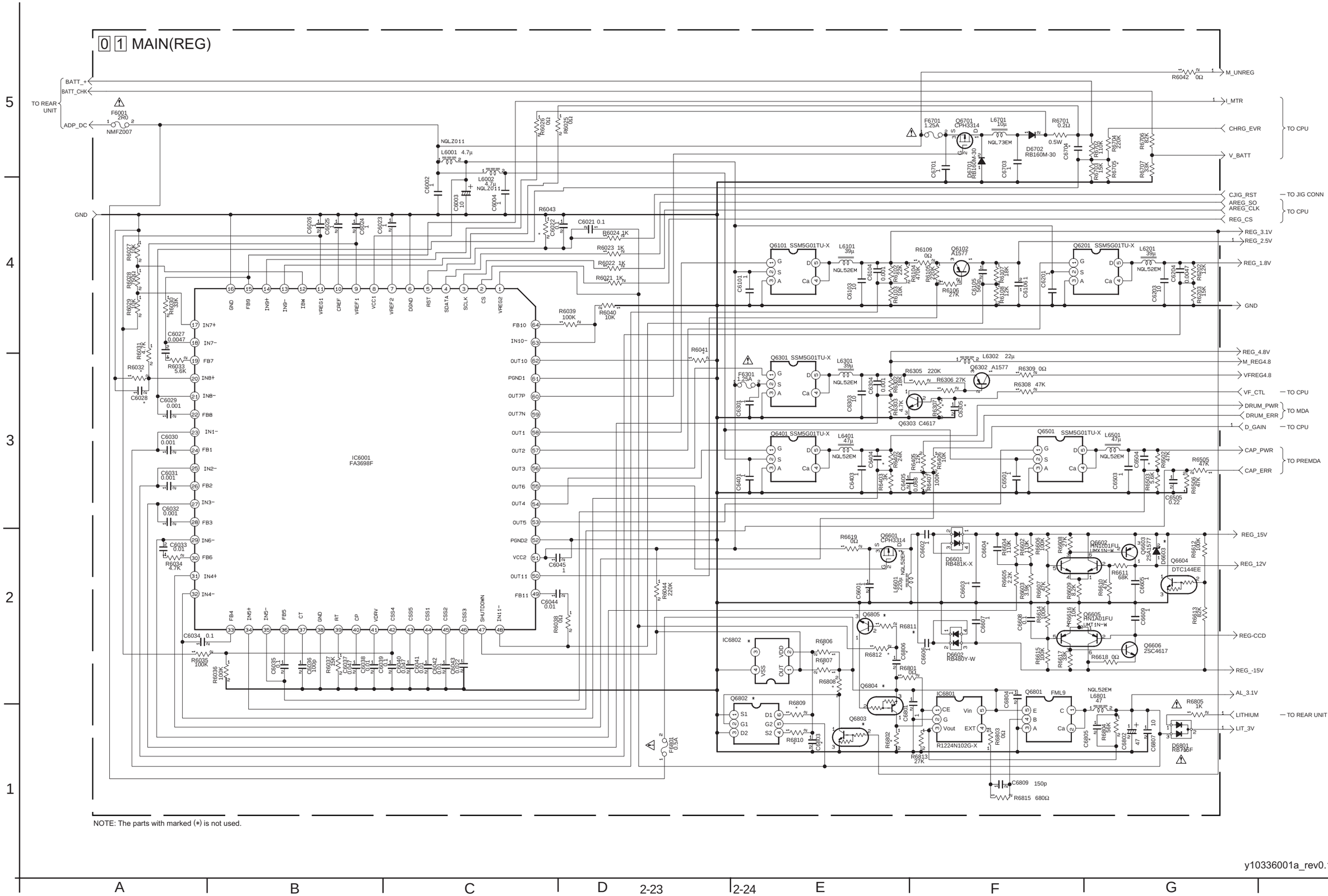


## USB SCHEMATIC DIAGRAM

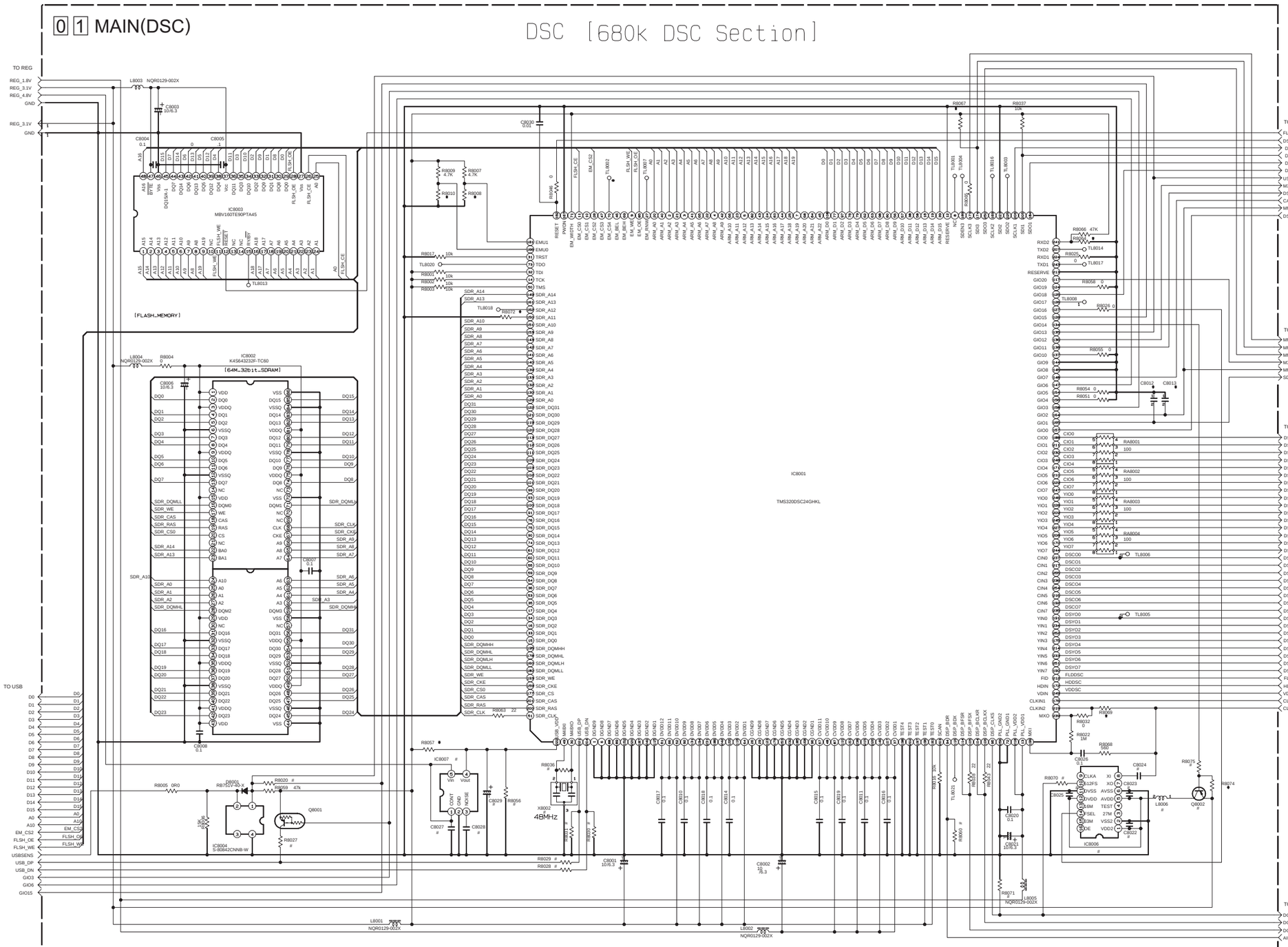



y30216001a_rev0

## ■ REG SCHEMATIC DIAGRAM



## ■ DSC SCHEMATIC DIAGRAM




# EXCANGE PARTS LIST

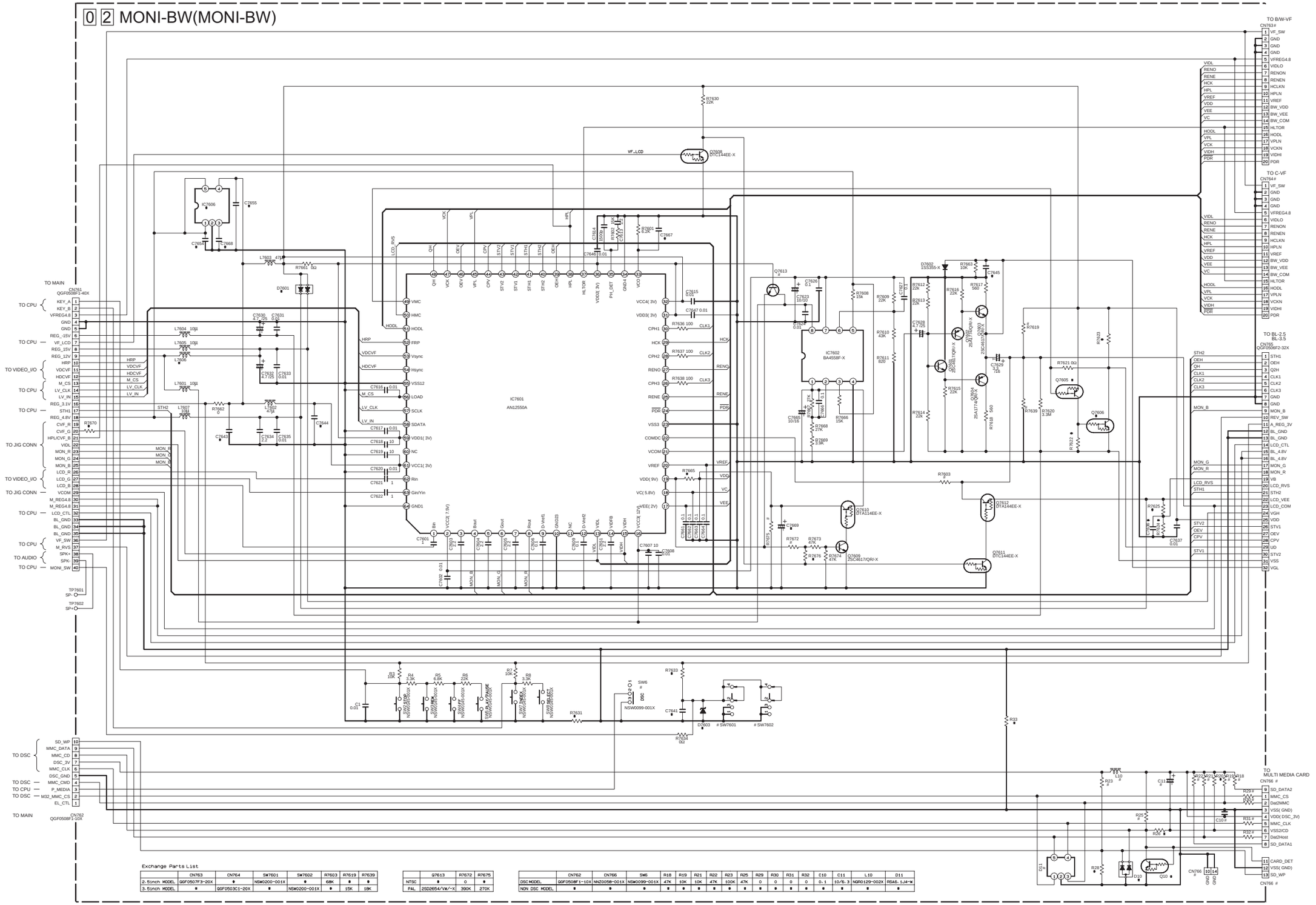
| SYMBOL NO. / MODEL | IC8006 | IC8007 | X8002 | Q8001 | Q8002 | L8006 | R8020 | R8027 | R8028 | R8029 | R8030 | R8031 | R8035 | R8056 | R8060 | R8070 | R8071 | R8074 | R8075 | C8022 | C8023 | C8024 | C8025 | C8027 | C8028 | C8029 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ONLY DSC | ⊗ | MM1613CN -A | NAX0998 -001X | DTA114EE -X | ⊗ | ⊗ | 0Ω | 1.5kΩ | 22Ω | 22Ω | 1MΩ | 1MΩ | 1MΩ | ⊗ | 0Ω | ⊗ | 0Ω | ⊗ | ⊗ | ⊗ | ⊗ | ⊗ | ⊗ | 1μF | 0.1μF | 10μF /6.3V |
| WEB CAM | BU2088FV -X | ⊗ | ⊗ | ⊗ | 2SA1774 /RA -X | NQR0129 -002X | ⊗ | ⊗ | ⊗ | ⊗ | 0Ω | 0Ω | ⊗ | 0Ω | ⊗ | 22Ω | ⊗ | 47kΩ | 1kΩ | 0.1μF | 0.1μF | 0.1μF | 0.1μF | ⊗ | ⊗ | ⊗ |

NOTE: The parts with marked (※) is not used.

y10339001a_rev0.1

# ■ MONI-BW SCHEMATIC DIAGRAM

## 0 2 MONI-BW(MONI-BW)




| | CN763 | CN764 | SW7601 | SW7602 | R7603 | R7619 | R7639 |
|---|---|---|---|---|---|---|---|
| 2.5inch MODEL | QGF0507F3-20X | * | NSW0200-001X | * | 68K | * | * |
| 3.5inch MODEL | * | QGF0503C1-20X | * | NSW0200-001X | * | 15K | 18K |

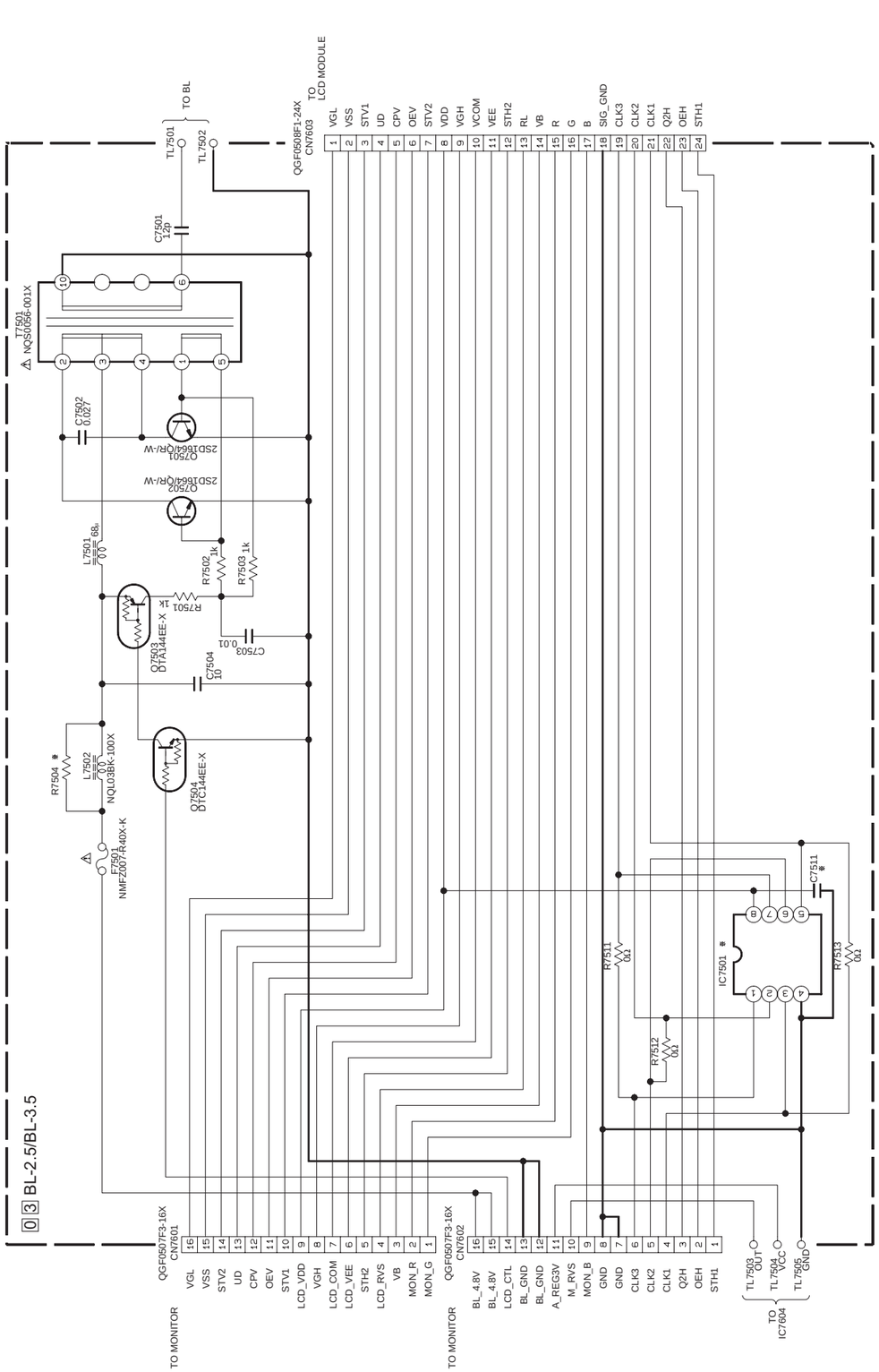
| | Q7613 | R7672 | R7675 |
|---|---|---|---|
| NTSC | * | 0 | * |
| PAL | 2SD2654/YM/-X | 390K | 270K |

| | CN762 | CN766 | SW6 | R18 | R19 | R21 | R22 | R23 | R25 | R29 | R30 | R31 | R32 | C10 | C11 | L10 | D11 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DSC MODEL | QGF0508F1-10X | NNZ0059-001X | NSW0099-001X | 47K | 10K | 10K | 47K | 100K | 47K | 0 | 0 | 0 | 0 | 0.1 | 10/6.3 | NQR0129-002X | RSA6.1J4-W |
| NON DSC MODEL | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |

NOTE: The parts with marked (※) is not used.

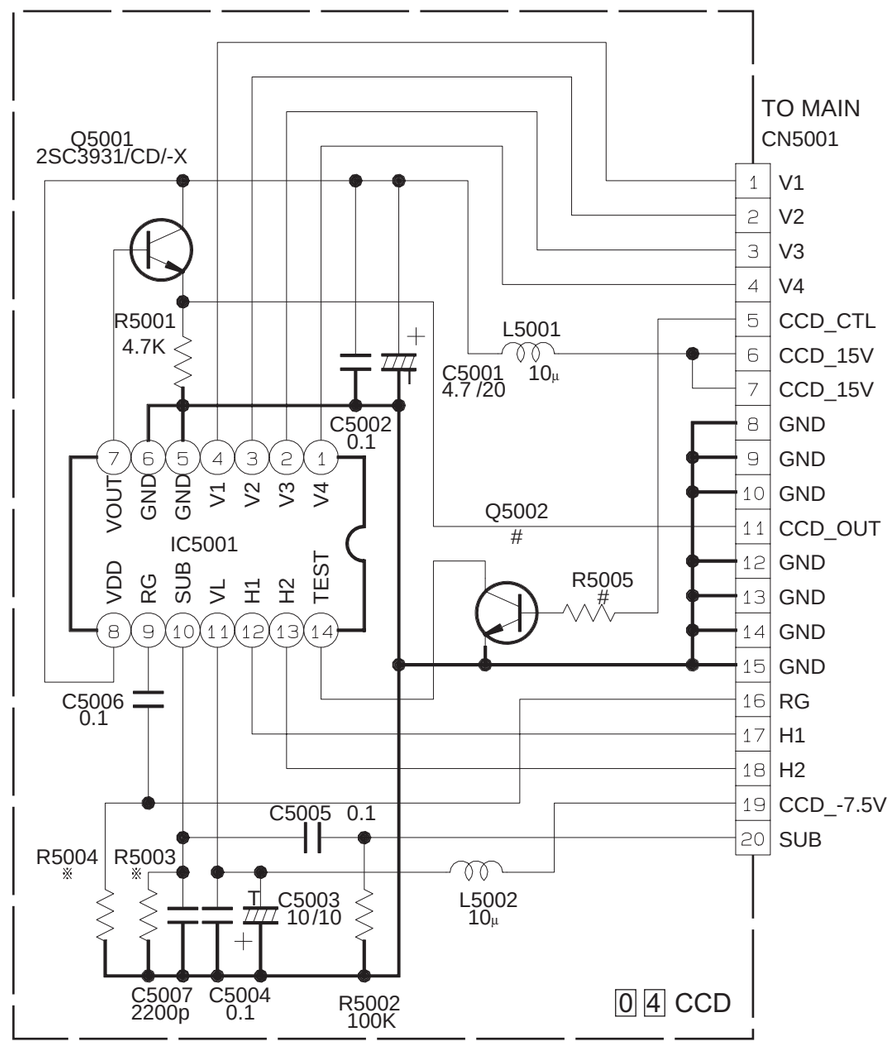
y10337001a_rev0.1

## ■ BL-2.5/BL-3.5 SCHEMATIC DIAGRAM




## ■ CCD SCHEMATIC DIAGRAM

*NOTES :* ● *IC5001 is incorporated in the CCD base assembly.*
*When IC 5001 needs replacement, replace the CCD base assembly in whole because it cannot be replaced alone.*

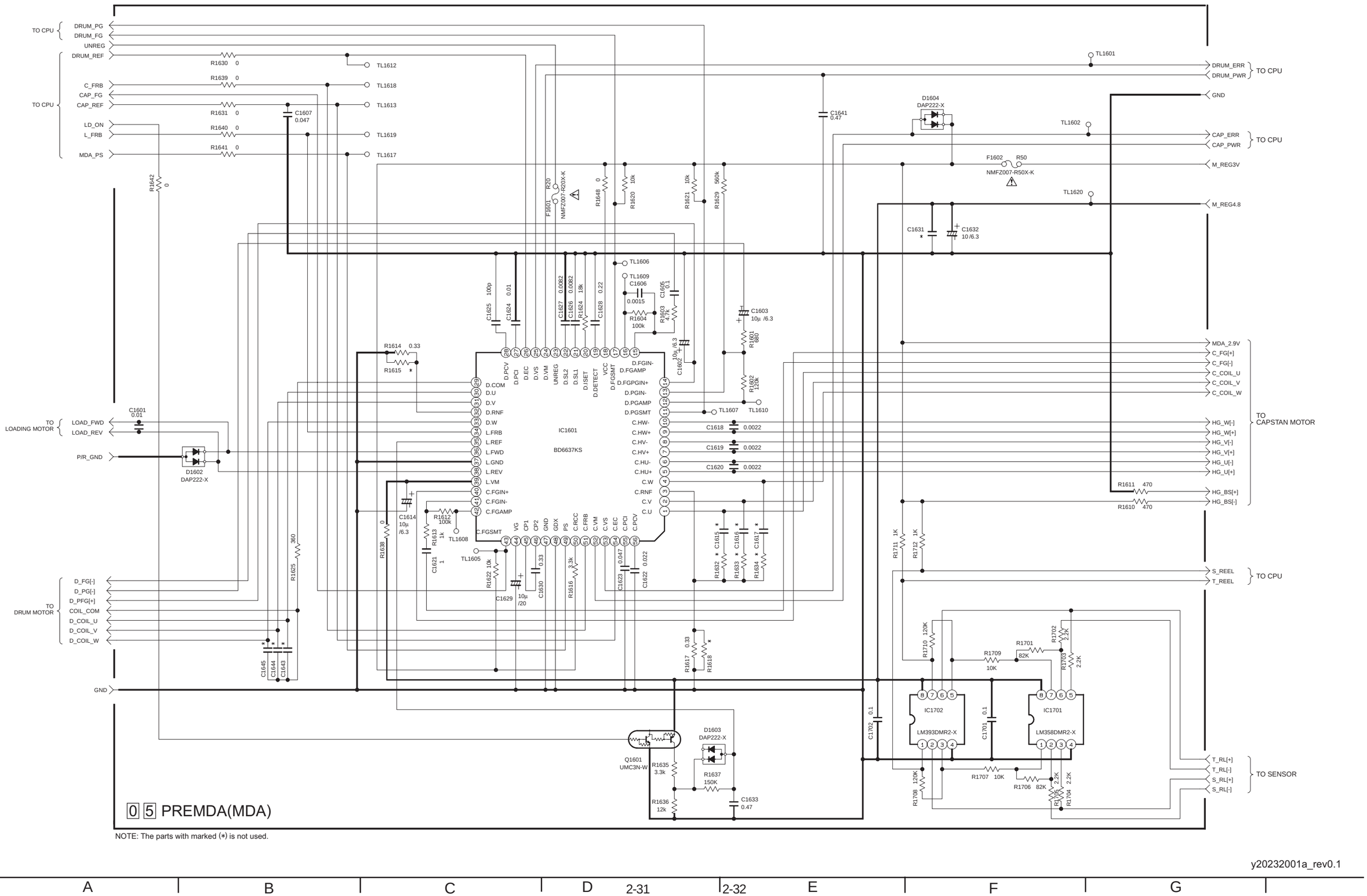



| | Q5002 | R5005 |
|---|---|---|
| DSC MODEL | 2SC4081/QR/-X | 4.7K |
| NON DSC MODEL | ※ | ※ |

NOTE: The parts with marked (※) is not used.

y40106001a_rev0.1

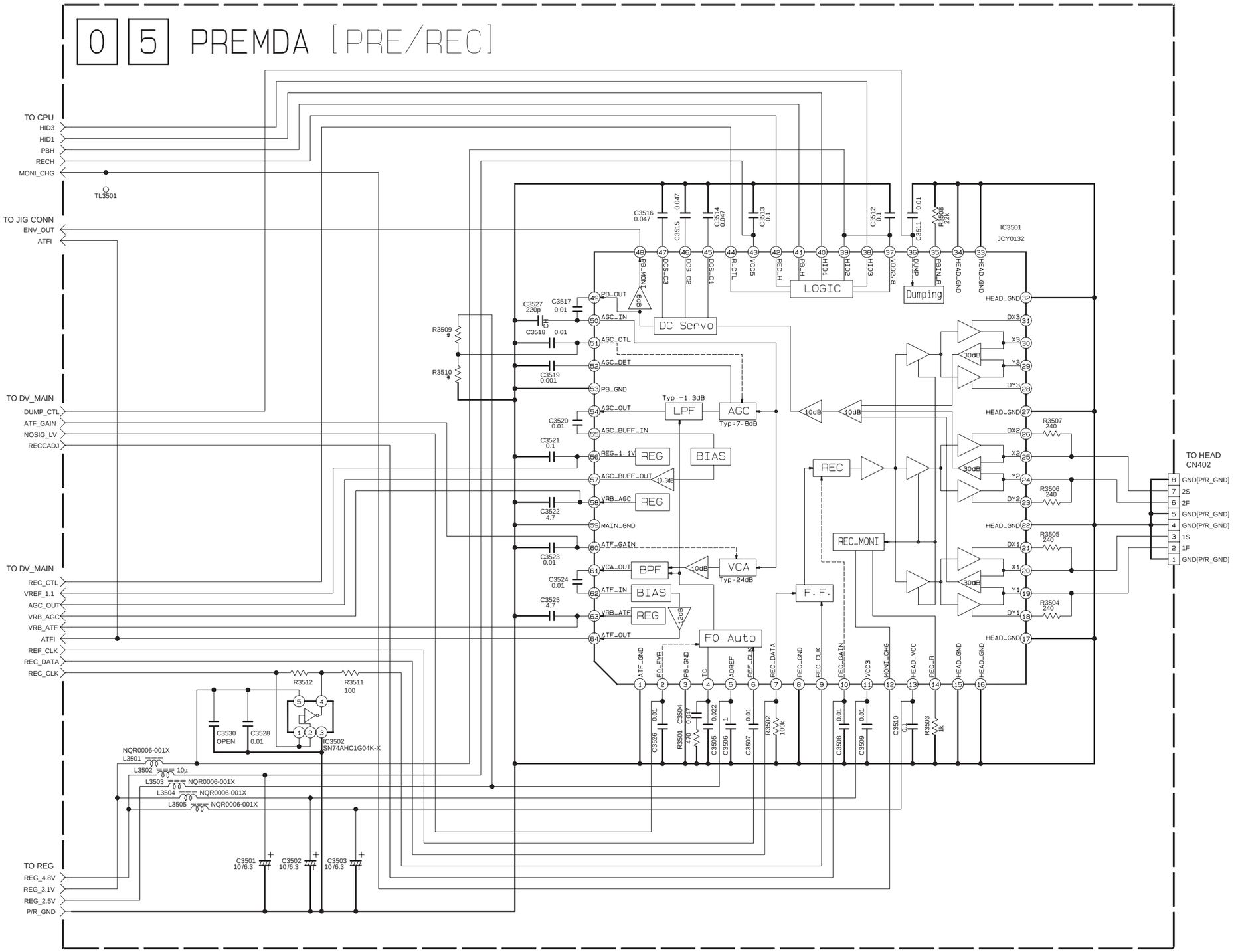
# ■ MDA SCHEMATIC DIAGRAM




NOTE: The parts with marked (*) is not used.

y20232001a_rev0.1

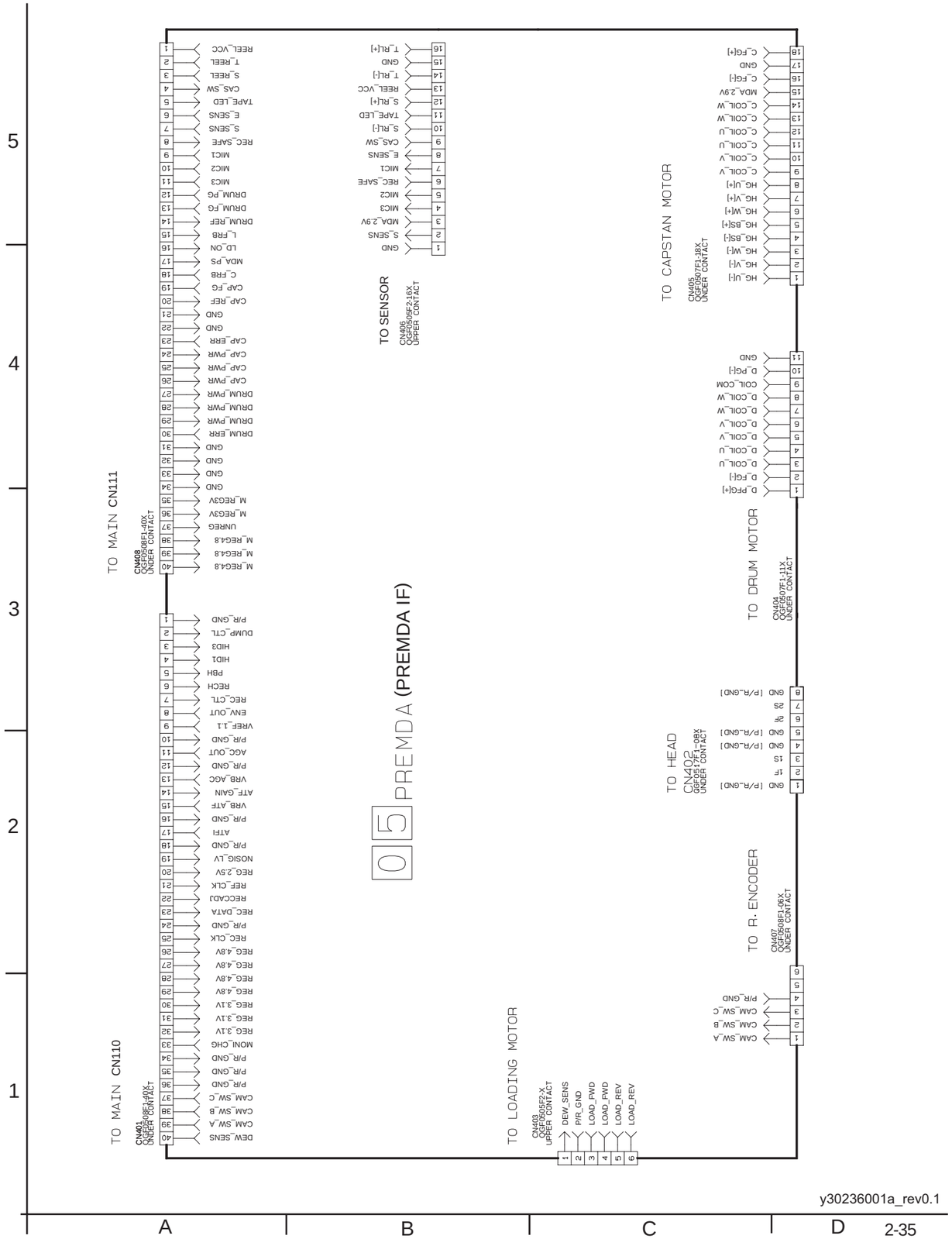
## ■ PRE/REC SCHEMATIC DIAGRAM




NOTE: The parts with marked (※) is not used.

y20234001a_rev0.1

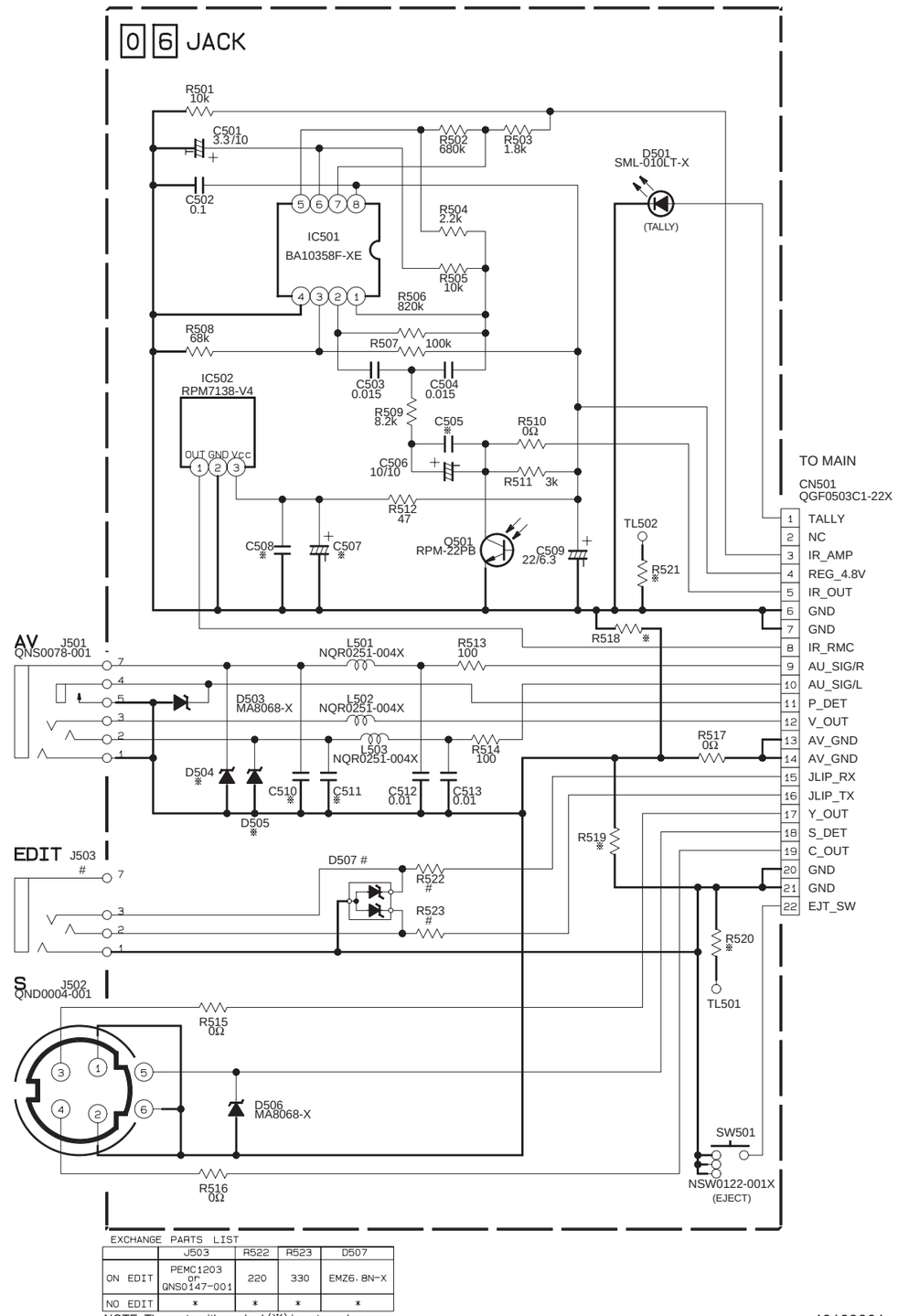
## ■ PREMDA IF SCHEMATIC DIAGRAM




y30236001a_rev0.1



## ■ JACK SCHEMATIC DIAGRAM



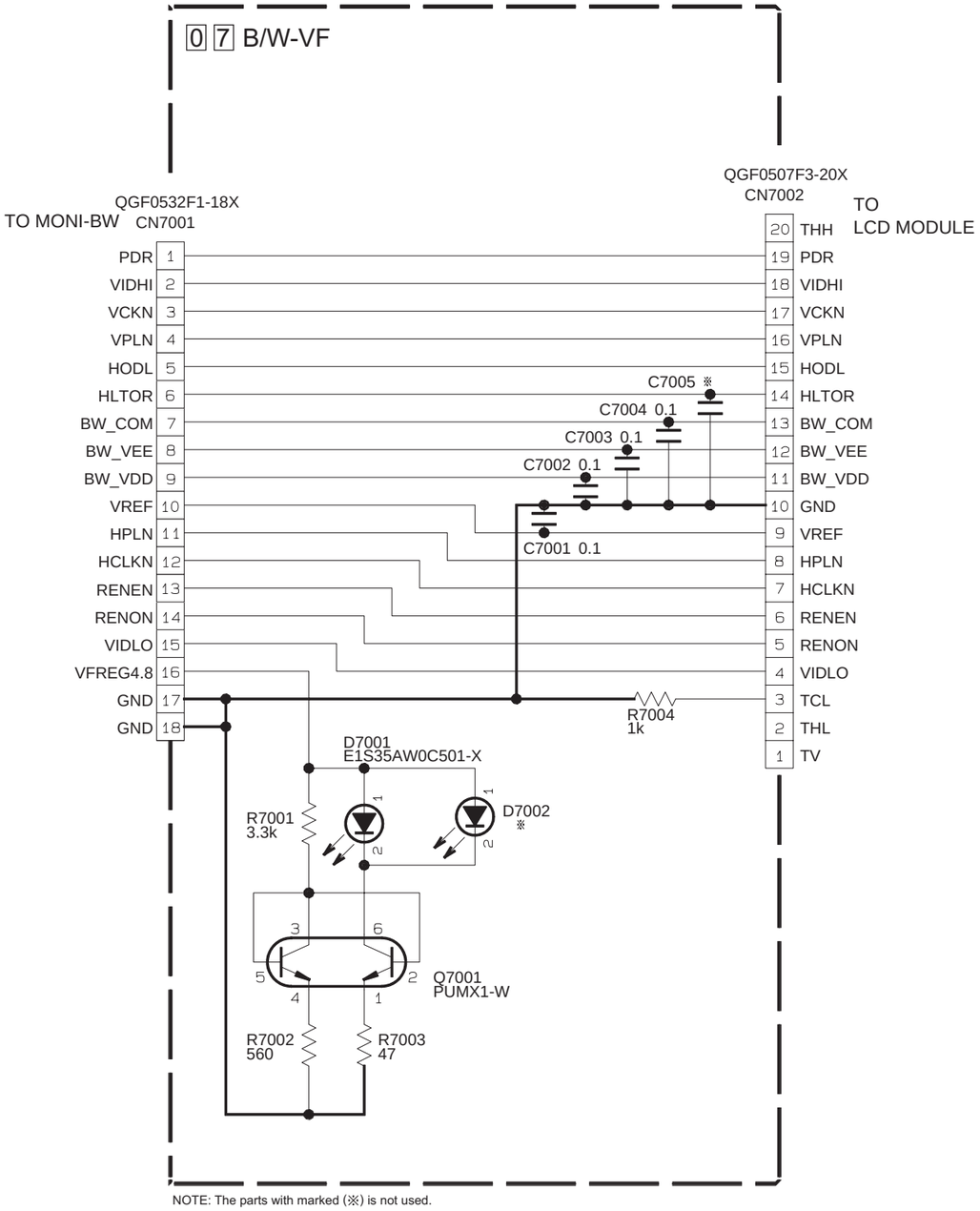

EXCHANGE PARTS LIST

| | J503 | R522 | R523 | D507 |
|---|---|---|---|---|
| ON EDIT | PEMC1203 or QNS0147-001 | 220 | 330 | EMZ6.8N-X |
| NO EDIT | * | * | * | * |

NOTE: The parts with marked (※) is not used.

y40103001a_rev0.1

## ■ B/W-VF SCHEMATIC DIAGRAM



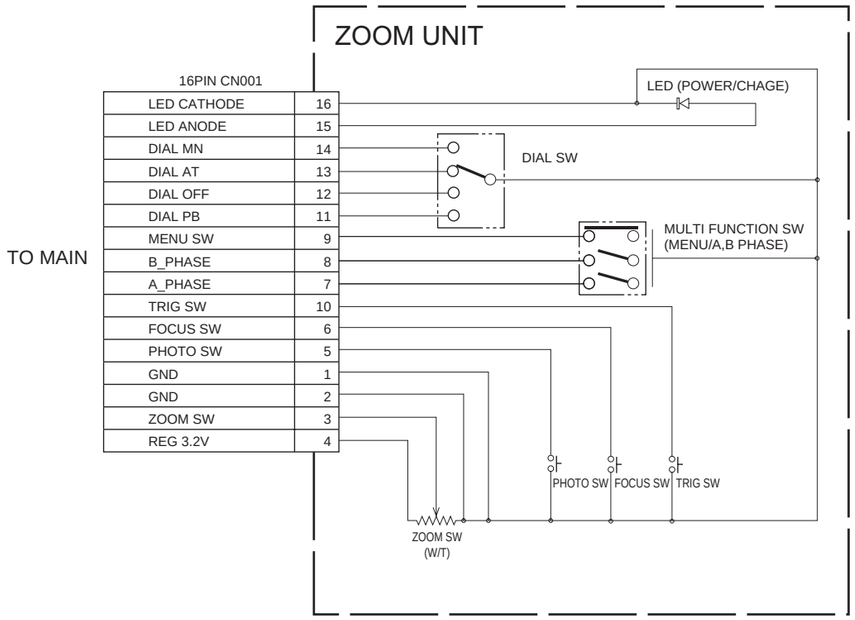

NOTE: The parts with marked (※) is not used.

y40104001a_rev0.1



## ■ ZOOM UNIT SCHEMATIC DIAGRAM

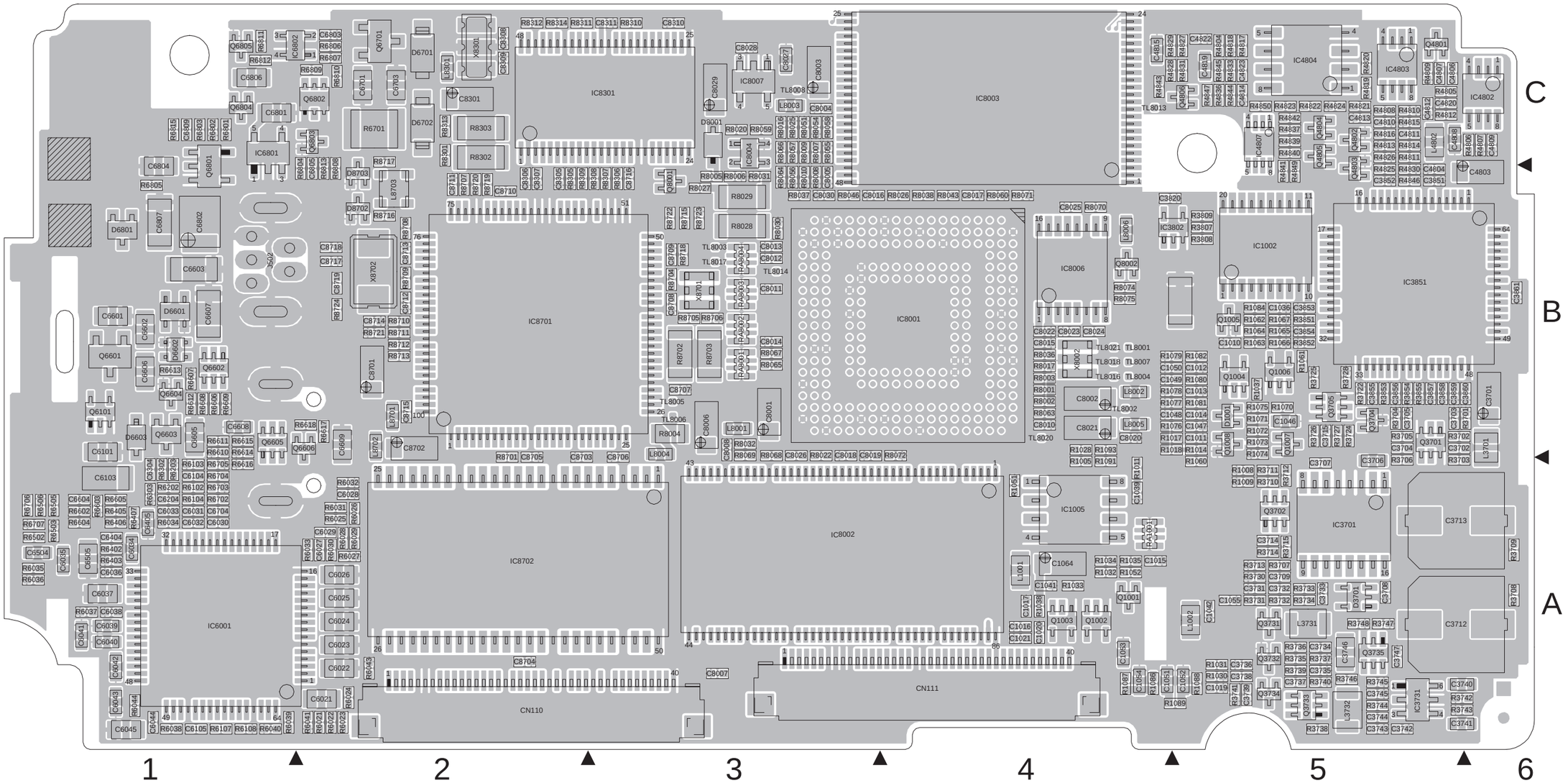
*NOTES : ● The schematic diagram is only for reference. Avoid replacing individual parts. Replace the entire unit only.*



## ■ MAIN CIRCUIT BOARD

**<01> MAIN**
**YB 10404-01-01**

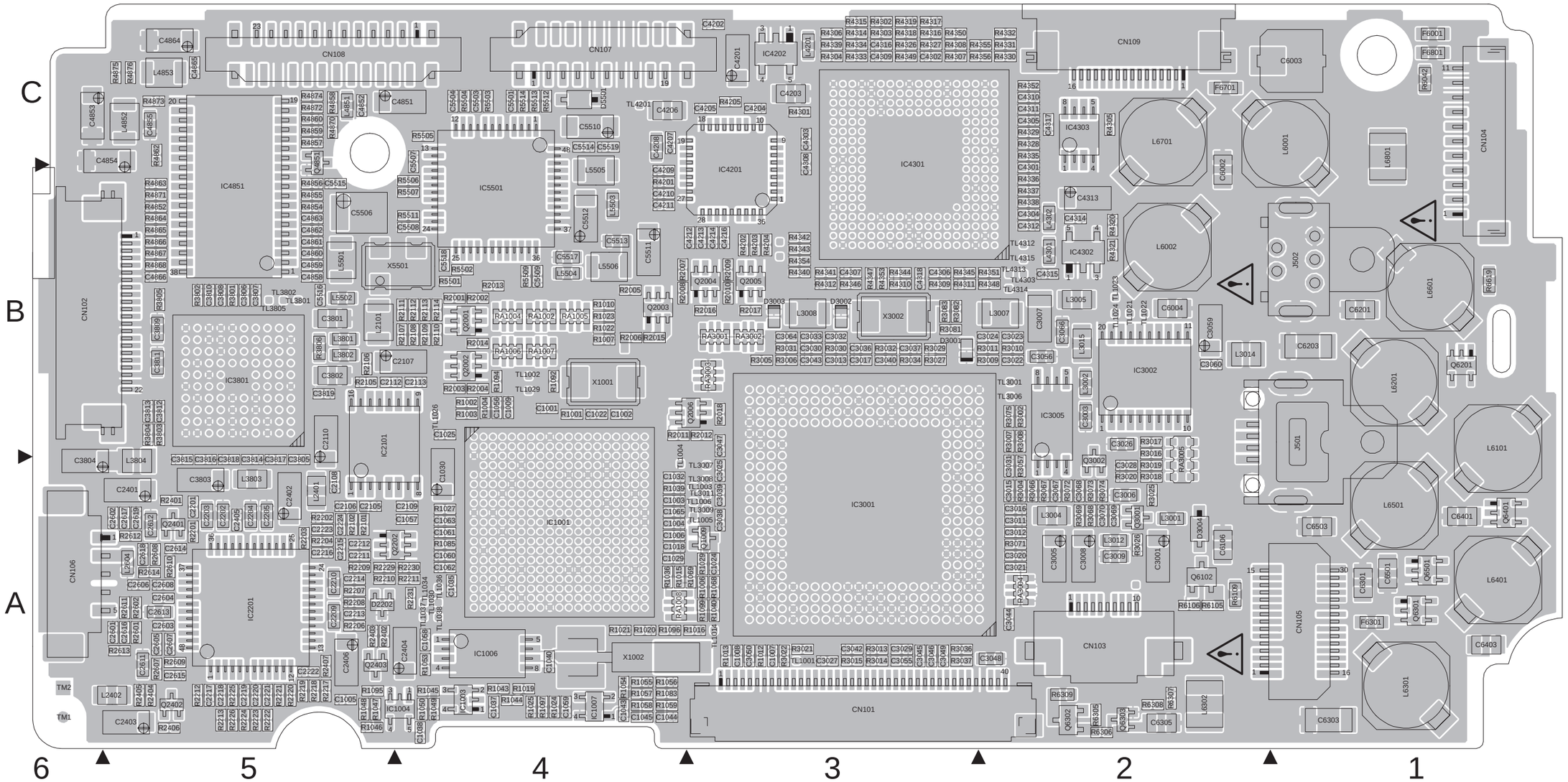
**FOIL SIDE(B)**



## ■ MAIN CIRCUIT BOARD

**<01> MAIN**
**YB 10404-01-01**

**COMPONENT SIDE(A)**



## COMPONENT PARTS LOCATION GUIDE <MAIN> YB 10404-01-01

| REF.NO. | LOCATION |
|---|---|
| **CAPACITOR** | |
| C1001 | A C 4B |
| C1002 | A C 4B |
| C1003 | A C 4A |
| C1004 | A C 4A |
| C1005 | A C 5A |
| C1006 | A C 4A |
| C1007 | A C 3A |
| C1008 | A C 3A |
| C1009 | A C 4B |
| C1010 | B C 5B |
| C1011 | B C 5B |
| C1012 | B C 5B |
| C1013 | B C 5B |
| C1014 | B C 5B |
| C1015 | B C 4A |
| C1016 | B C 4A |
| C1017 | B C 4A |
| C1018 | A C 4A |
| C1019 | B C 5A |
| C1020 | B C 4A |
| C1021 | B C 4A |
| C1022 | A C 4B |
| C1024 | A C 3A |
| C1025 | A C 4B |
| C1029 | A C 4A |
| C1030 | A C 4A |
| C1032 | A C 4A |
| C1035 | A C 4A |
| C1036 | B C 5B |
| C1037 | A C 4A |
| C1038 | A C 4A |
| C1039 | B C 4A |
| C1040 | A C 4A |
| C1041 | B C 4A |
| C1042 | B C 5A |
| C1043 | A C 4A |
| C1044 | A C 4A |
| C1045 | A C 4A |
| C1046 | B C 5B |
| C1047 | B C 5B |
| C1048 | B C 5B |
| C1049 | B C 5B |
| C1050 | B C 5B |
| C1051 | B C 4A |
| C1052 | B C 5A |
| C1053 | B C 4A |
| C1054 | B C 4A |
| C1055 | B C 5A |
| C1056 | A C 4B |
| C1057 | A C 4A |
| C1058 | A C 4A |
| C1059 | A C 4A |
| C1060 | A C 4A |
| C1061 | A C 4A |
| C1062 | A C 4A |
| C1063 | A C 4A |
| C1064 | B C 4A |
| C1065 | A C 4A |
| C2105 | A C 5A |
| C2106 | A C 5A |
| C2107 | A C 4B |
| C2108 | A C 5A |
| C2109 | A C 4A |
| C2110 | A C 5B |
| C2112 | A C 5B |
| C2113 | A C 4B |
| C2201 | A C 5A |
| C2202 | A C 5A |
| C2203 | A C 5A |
| C2204 | A C 5A |
| C2205 | A C 5A |
| C2209 | A C 5A |
| C2210 | A C 5A |
| C2211 | A C 5A |
| C2212 | A C 5A |
| C2213 | A C 5A |
| C2214 | A C 5A |
| C2215 | A C 5A |
| C2216 | A C 5A |
| C2217 | A C 5A |
| C2218 | A C 5A |
| C2219 | A C 5A |
| C2220 | A C 5A |
| C2221 | A C 5A |
| C2222 | A C 5A |
| C2223 | A C 5A |
| C2224 | A C 5A |
| C2401 | A C 5A |
| C2402 | A C 5A |
| C2403 | A C 5A |
| C2404 | A C 4A |
| C2405 | A C 5A |
| C2406 | A C 5A |
| C2601 | A C 5A |
| C2602 | A C 5A |
| C2603 | A C 5A |
| C2604 | A C 5A |
| C2605 | A C 5A |
| C2606 | A C 5A |
| C2607 | A C 5A |
| C2608 | A C 5A |
| C2611 | A C 5A |
| C2612 | A C 5A |
| C2613 | A C 5A |
| C2614 | A C 5A |
| C2615 | A C 5A |
| C2616 | A C 5A |
| C2617 | A C 5A |
| C2618 | A C 5A |
| C2619 | A C 5A |
| C3001 | A C 2A |
| C3003 | A C 2B |
| C3005 | A C 2A |
| C3006 | A C 2A |
| C3007 | A C 2B |
| C3008 | A C 2A |
| C3009 | A C 2A |

| REF.NO. | LOCATION |
|---|---|
| C3011 | A C 2A |
| C3012 | A C 2A |
| C3013 | A C 3B |
| C3015 | A C 2A |
| C3016 | A C 2A |
| C3017 | A C 3B |
| C3020 | A C 2A |
| C3021 | A C 2A |
| C3022 | A C 2B |
| C3023 | A C 2B |
| C3024 | A C 2B |
| C3025 | A C 3A |
| C3026 | A C 2B |
| C3027 | A C 3A |
| C3028 | A C 2A |
| C3029 | A C 3A |
| C3030 | A C 3B |
| C3031 | A C 2A |
| C3032 | A C 3B |
| C3033 | A C 3B |
| C3036 | A C 3B |
| C3037 | A C 3B |
| C3038 | A C 3A |
| C3039 | A C 3A |
| C3040 | A C 3B |
| C3042 | A C 3A |
| C3043 | A C 3B |
| C3044 | A C 2A |
| C3045 | A C 3A |
| C3046 | A C 3A |
| C3047 | A C 3B |
| C3048 | A C 2A |
| C3049 | A C 3A |
| C3050 | A C 3A |
| C3055 | A C 3A |
| C3056 | A C 2B |
| C3059 | A C 2B |
| C3060 | A C 2B |
| C3064 | A C 3B |
| C3066 | A C 2B |
| C3067 | A C 2A |
| C3068 | A C 2A |
| C3069 | A C 2A |
| C3070 | A C 2A |
| C3701 | B C 6B |
| C3702 | B C 5B |
| C3703 | B C 5B |
| C3704 | B C 5B |
| C3705 | B C 5B |
| C3706 | B C 5A |
| C3707 | B C 5A |
| C3708 | B C 5A |
| C3709 | B C 5A |
| C3712 | B C 5A |
| C3713 | B C 5A |
| C3714 | B C 5A |
| C3715 | B C 5B |
| C3731 | B C 5A |
| C3732 | B C 5A |
| C3733 | B C 5A |
| C3734 | B C 5A |
| C3735 | B C 5A |
| C3736 | B C 5A |
| C3737 | B C 5A |
| C3738 | B C 5A |
| C3739 | B C 5A |
| C3740 | B C 6A |
| C3741 | B C 6A |
| C3742 | B C 5A |
| C3743 | B C 5A |
| C3744 | B C 5A |
| C3745 | B C 5A |
| C3746 | B C 5A |
| C3747 | B C 5A |
| C3801 | A C 5B |
| C3802 | A C 5B |
| C3803 | A C 5A |
| C3804 | A C 6A |
| C3805 | A C 5A |
| C3806 | A C 5B |
| C3807 | A C 5B |
| C3808 | A C 5B |
| C3809 | A C 5B |
| C3810 | A C 5B |
| C3811 | A C 5B |
| C3812 | A C 5B |
| C3813 | A C 5B |
| C3814 | A C 5A |
| C3815 | A C 5A |
| C3816 | A C 5A |
| C3817 | A C 5A |
| C3818 | A C 5A |
| C3819 | A C 5B |
| C3820 | B C 5B |
| C3851 | B C 5B |
| C3852 | B C 5B |
| C3853 | B C 5B |
| C3854 | B C 5B |
| C3855 | B C 5B |
| C3856 | B C 5B |
| C3857 | B C 5B |
| C3858 | B C 5B |
| C3859 | B C 5B |
| C3860 | B C 6B |
| C3861 | B C 6B |
| C4201 | A C 3C |
| C4202 | A C 3C |
| C4203 | A C 3C |
| C4204 | A C 3C |
| C4205 | A C 3C |
| C4206 | A C 4C |
| C4207 | A C 4C |
| C4208 | A C 4C |
| C4209 | A C 4B |
| C4210 | A C 4B |
| C4211 | A C 4B |
| C4212 | A C 4B |
| C4213 | A C 3B |

| REF.NO. | LOCATION |
|---|---|
| C4214 | A C 3B |
| C4216 | A C 3B |
| C4301 | A C 2B |
| C4302 | A C 3C |
| C4303 | A C 3C |
| C4304 | A C 2B |
| C4305 | A C 2C |
| C4306 | A C 3B |
| C4307 | A C 3B |
| C4308 | A C 3C |
| C4309 | A C 3C |
| C4310 | A C 2C |
| C4311 | A C 2C |
| C4312 | A C 2B |
| C4313 | A C 2B |
| C4314 | A C 2B |
| C4315 | A C 2B |
| C4316 | A C 3C |
| C4317 | A C 2C |
| C4318 | A C 3B |
| C4803 | B C 6B |
| C4804 | B C 5B |
| C4806 | B C 5C |
| C4807 | B C 5C |
| C4808 | B C 5C |
| C4809 | B C 6C |
| C4810 | B C 5C |
| C4811 | B C 5C |
| C4812 | B C 5C |
| C4813 | B C 5C |
| C4814 | B C 5C |
| C4815 | B C 4C |
| C4819 | B C 5C |
| C4820 | B C 5C |
| C4822 | B C 5C |
| C4823 | B C 5C |
| C4851 | A C 4C |
| C4852 | A C 5C |
| C4853 | A C 6C |
| C4854 | A C 5C |
| C4855 | A C 5C |
| C4858 | A C 5B |
| C4859 | A C 5B |
| C4860 | A C 5B |
| C4861 | A C 5B |
| C4862 | A C 5B |
| C4863 | A C 5B |
| C4864 | A C 5C |
| C4865 | A C 5C |
| C4866 | A C 5B |
| C5501 | A C 4C |
| C5503 | A C 4C |
| C5504 | A C 4C |
| C5506 | A C 5B |
| C5507 | A C 4C |
| C5508 | A C 4B |
| C5509 | A C 4B |
| C5510 | A C 4C |
| C5511 | A C 4B |
| C5512 | A C 4B |
| C5513 | A C 4B |
| C5514 | A C 4C |
| C5515 | A C 5B |
| C5516 | A C 5B |
| C5517 | A C 4B |
| C5518 | A C 4B |
| C5519 | A C 4C |
| C6002 | A C 2B |
| C6003 | A C 1C |
| C6004 | A C 2B |
| C6021 | B C 2A |
| C6022 | B C 2A |
| C6023 | B C 2A |
| C6024 | B C 2A |
| C6025 | B C 2A |
| C6026 | B C 2A |
| C6027 | B C 2A |
| C6028 | B C 2A |
| C6029 | B C 2A |
| C6030 | B C 1A |
| C6031 | B C 1A |
| C6032 | B C 1A |
| C6033 | B C 1A |
| C6034 | B C 1A |
| C6035 | B C 1A |
| C6036 | B C 1A |
| C6037 | B C 1A |
| C6038 | B C 1A |
| C6039 | B C 1A |
| C6040 | B C 1A |
| C6041 | B C 1A |
| C6042 | B C 1A |
| C6043 | B C 1A |
| C6044 | B C 1A |
| C6045 | B C 1A |
| C6101 | B C 1B |
| C6103 | B C 1A |
| C6104 | B C 1A |
| C6105 | B C 1A |
| C6106 | A C 2A |
| C6201 | A C 1B |
| C6203 | A C 1B |
| C6204 | B C 1A |
| C6301 | A C 1A |
| C6303 | A C 1A |
| C6304 | B C 1A |
| C6305 | A C 2A |
| C6401 | A C 1A |
| C6403 | A C 1A |
| C6404 | B C 1A |
| C6405 | B C 1A |
| C6501 | A C 1A |
| C6503 | A C 1A |
| C6504 | B C 1A |
| C6505 | B C 1A |
| C6601 | B C 1B |
| C6602 | B C 1B |
| C6603 | B C 1B |

| REF.NO. | LOCATION |
|---|---|
| C6604 | B C 1A |
| C6605 | B C 1B |
| C6606 | B C 1B |
| C6607 | B C 1B |
| C6608 | B C 1B |
| C6609 | B C 2B |
| C6701 | B C 2C |
| C6703 | B C 2C |
| C6704 | B C 1A |
| C6801 | B C 1C |
| C6802 | B C 1B |
| C6803 | B C 2C |
| C6804 | B C 1B |
| C6805 | B C 2B |
| C6806 | B C 1C |
| C6807 | B C 1B |
| C6809 | B C 1C |
| C8001 | B C 3B |
| C8002 | B C 4B |
| C8003 | B C 3C |
| C8004 | B C 3C |
| C8005 | B C 3B |
| C8006 | B C 3B |
| C8007 | B C 3A |
| C8008 | B C 3B |
| C8010 | B C 4B |
| C8011 | B C 3B |
| C8012 | B C 3B |
| C8013 | B C 3B |
| C8014 | B C 3B |
| C8015 | B C 4B |
| C8016 | B C 3B |
| C8017 | B C 4B |
| C8018 | B C 3B |
| C8019 | B C 3B |
| C8020 | B C 4B |
| C8021 | B C 4B |
| C8022 | B C 4B |
| C8023 | B C 4B |
| C8024 | B C 4B |
| C8025 | B C 4B |
| C8026 | B C 3B |
| C8027 | B C 3C |
| C8028 | B C 3C |
| C8029 | B C 3C |
| C8030 | B C 3B |
| C8301 | B C 2C |
| C8305 | B C 2B |
| C8306 | B C 2B |
| C8307 | B C 2B |
| C8308 | B C 2C |
| C8309 | B C 2C |
| C8310 | B C 3C |
| C8311 | B C 3C |
| C8701 | B C 2B |
| C8702 | B C 2B |
| C8703 | B C 2B |
| C8704 | B C 2A |
| C8705 | B C 2B |
| C8706 | B C 3B |
| C8707 | B C 3B |
| C8708 | B C 3B |
| C8709 | B C 3B |
| C8710 | B C 2B |
| C8711 | B C 2B |
| C8712 | B C 2B |
| C8713 | B C 2B |
| C8714 | B C 2B |
| C8715 | B C 2B |
| C8716 | B C 3B |
| C8717 | B C 2B |
| C8718 | B C 2B |
| C8719 | B C 2B |
| | |
| **CONNECTOR** | |
| CN101 | A C 3A |
| CN102 | A C 5B |
| CN103 | A C 2A |
| CN104 | A C 1C |
| CN105 | A C 2A |
| CN106 | A C 6A |
| CN107 | A C 4C |
| CN108 | A C 5C |
| CN109 | A C 2C |
| CN110 | B C 2A |
| CN111 | B C 4A |
| | |
| **DIODE** | |
| D1001 | B C 5B |
| D2202 | A C 5A |
| D3001 | A C 3B |
| D3002 | A C 3B |
| D3003 | A C 3B |
| D3004 | A C 2A |
| D3701 | B C 5A |
| D5501 | A C 4C |
| D6601 | B C 1B |
| D6602 | B C 1B |
| D6603 | B C 1B |
| D6701 | B C 2C |
| D6702 | B C 2C |
| D6801 | B C 1B |
| D8001 | B C 3C |
| D8702 | B C 2B |
| D8703 | B C 2B |
| | |
| **FUSE** | |
| F6001 | A C 1C |
| F6301 | A C 1A |
| F6701 | A C 2C |
| F6801 | A C 1C |
| | |
| **IC** | |
| IC1001 | A C 4A |
| IC1002 | B C 5B |
| IC1003 | A C 4A |
| IC1004 | A C 4A |
| IC1005 | B C 4A |

| REF.NO. | LOCATION |
|---|---|
| IC1006 | A C 4A |
| IC1007 | A C 4A |
| IC2101 | A C 5B |
| IC2201 | A C 5A |
| IC3001 | A C 3A |
| IC3002 | A C 2B |
| IC3005 | A C 2B |
| IC3701 | B C 5A |
| IC3731 | B C 5A |
| IC3801 | A C 5B |
| IC3802 | B C 5B |
| IC3851 | B C 5B |
| IC4201 | A C 3B |
| IC4202 | A C 3C |
| IC4301 | A C 3C |
| IC4302 | A C 2B |
| IC4303 | A C 2C |
| IC4802 | B C 6C |
| IC4803 | B C 5C |
| IC4804 | B C 5C |
| IC4807 | B C 5C |
| IC4851 | A C 5B |
| IC5501 | A C 4B |
| IC6001 | B C 1A |
| IC6801 | B C 1C |
| IC6802 | B C 2C |
| IC8001 | B C 4B |
| IC8002 | B C 3A |
| IC8003 | B C 4C |
| IC8004 | B C 3C |
| IC8006 | B C 4B |
| IC8007 | B C 3C |
| IC8301 | B C 3C |
| IC8701 | B C 2B |
| IC8702 | B C 2A |
| | |
| **COIL** | |
| L1001 | B C 4A |
| L1002 | B C 5A |
| L2101 | A C 5B |
| L2401 | A C 5A |
| L2402 | A C 5A |
| L2604 | A C 5A |
| L3001 | A C 2A |
| L3002 | A C 2B |
| L3004 | A C 2A |
| L3005 | A C 2B |
| L3007 | A C 2B |
| L3008 | A C 3B |
| L3012 | A C 2A |
| L3014 | A C 2B |
| L3015 | A C 2B |
| L3701 | B C 6B |
| L3731 | B C 5A |
| L3732 | B C 5A |
| L3801 | A C 5B |
| L3802 | A C 5B |
| L3803 | A C 5A |
| L3804 | A C 5A |
| L4201 | A C 3C |
| L4301 | A C 2B |
| L4302 | A C 2B |
| L4802 | B C 5C |
| L4851 | A C 5C |
| L4852 | A C 5C |
| L4853 | A C 5C |
| L5501 | A C 5B |
| L5502 | A C 5B |
| L5503 | A C 4B |
| L5504 | A C 4B |
| L5505 | A C 4B |
| L5506 | A C 4B |
| L6001 | A C 1C |
| L6002 | A C 2B |
| L6101 | A C 1B |
| L6201 | A C 1B |
| L6301 | A C 1A |
| L6302 | A C 2A |
| L6401 | A C 1A |
| L6501 | A C 1A |
| L6601 | A C 1B |
| L6701 | A C 2C |
| L6801 | A C 1C |
| L8001 | B C 3B |
| L8002 | B C 4B |
| L8003 | B C 3C |
| L8004 | B C 3B |
| L8005 | B C 4B |
| L8006 | B C 4B |
| L8301 | B C 2C |
| L8701 | B C 2B |
| L8702 | B C 2B |
| L8703 | B C 2B |
| | |
| **TRANSISTOR** | |
| Q1001 | B C 4A |
| Q1002 | B C 4A |
| Q1003 | B C 4A |
| Q1004 | B C 5B |
| Q1005 | B C 5B |
| Q1006 | B C 5B |
| Q1007 | B C 5B |
| Q1008 | B C 5B |
| Q1009 | A C 3A |
| Q2001 | A C 4B |
| Q2002 | A C 4B |
| Q2003 | A C 4B |
| Q2004 | A C 3B |
| Q2005 | A C 3B |
| Q2006 | A C 3B |
| Q2202 | A C 5A |
| Q2401 | A C 5A |
| Q2402 | A C 5A |
| Q2403 | A C 5A |
| Q3001 | A C 2A |
| Q3002 | A C 2A |
| Q3701 | B C 5B |
| Q3702 | B C 5A |

| REF.NO. | LOCATION |
|---|---|
| Q3704 | B C 5B |
| Q3705 | B C 5B |
| Q3731 | B C 5A |
| Q3732 | B C 5A |
| Q3733 | B C 5A |
| Q3734 | B C 5A |
| Q3735 | B C 5A |
| Q4801 | B C 5C |
| Q4802 | B C 5C |
| Q4803 | B C 5B |
| Q4804 | B C 5C |
| Q4805 | B C 5C |
| Q4806 | B C 5C |
| Q4851 | A C 5C |
| Q6101 | B C 1B |
| Q6102 | A C 2A |
| Q6201 | A C 1B |
| Q6301 | A C 1A |
| Q6302 | A C 2A |
| Q6303 | A C 2A |
| Q6401 | A C 1A |
| Q6501 | A C 1A |
| Q6601 | B C 1B |
| Q6602 | B C 1B |
| Q6603 | B C 1B |
| Q6604 | B C 1B |
| Q6605 | B C 1B |
| Q6606 | B C 2B |
| Q6701 | B C 2C |
| Q6801 | B C 1B |
| Q6802 | B C 2C |
| Q6803 | B C 2C |
| Q6804 | B C 1C |
| Q6805 | B C 1C |
| Q8001 | B C 3B |
| Q8002 | B C 4B |
| | |
| **RESISTOR** | |
| R1001 | A C 4B |
| R1002 | A C 4B |
| R1003 | A C 4B |
| R1004 | A C 4B |
| R1005 | B C 4A |
| R1006 | A C 3A |
| R1007 | A C 4B |
| R1008 | B C 5A |
| R1009 | B C 5A |
| R1010 | A C 4B |
| R1011 | B C 4A |
| R1012 | A C 3A |
| R1013 | A C 3A |
| R1014 | B C 5B |
| R1015 | A C 4A |
| R1016 | A C 3A |
| R1017 | B C 5B |
| R1018 | B C 5B |
| R1019 | A C 4A |
| R1020 | A C 4A |
| R1021 | A C 4A |
| R1022 | A C 4B |
| R1023 | A C 4B |
| R1024 | A C 4A |
| R1025 | A C 4A |
| R1027 | A C 4A |
| R1028 | B C 4B |
| R1029 | A C 3A |
| R1030 | B C 5A |
| R1031 | B C 5A |
| R1032 | B C 4A |
| R1033 | B C 4A |
| R1034 | B C 4A |
| R1035 | B C 4A |
| R1036 | A C 4A |
| R1037 | B C 5B |
| R1038 | B C 4A |
| R1039 | A C 4A |
| R1040 | A C 3A |
| R1043 | A C 4A |
| R1044 | A C 4A |
| R1045 | A C 4A |
| R1046 | A C 5A |
| R1047 | A C 5A |
| R1048 | A C 5A |
| R1049 | A C 4A |
| R1050 | A C 4A |
| R1051 | B C 4A |
| R1052 | B C 4A |
| R1053 | A C 4A |
| R1054 | A C 4A |
| R1055 | A C 4A |
| R1056 | A C 4A |
| R1057 | A C 4A |
| R1058 | A C 4A |
| R1059 | A C 4A |
| R1060 | B C 5A |
| R1061 | B C 5B |
| R1062 | B C 5B |
| R1063 | B C 5B |
| R1064 | B C 5B |
| R1065 | B C 5B |
| R1066 | B C 5B |
| R1067 | B C 5B |
| R1068 | A C 3A |
| R1069 | A C 3A |
| R1070 | B C 5B |
| R1071 | B C 5B |
| R1072 | B C 5B |
| R1073 | B C 5B |
| R1074 | B C 5B |
| R1075 | B C 5B |
| R1076 | B C 5B |
| R1077 | B C 5B |
| R1078 | B C 5B |
| R1079 | B C 5B |
| R1080 | B C 5B |
| R1081 | B C 5B |
| R1082 | B C 5B |
| R1083 | A C 4A |

| REF.NO. | LOCATION |
|---|---|
| R1084 | B C 5B |
| R1085 | A C 4A |
| R1086 | B C 4A |
| R1087 | B C 4A |
| R1088 | B C 5A |
| R1089 | B C 5A |
| R1091 | B C 4A |
| R1092 | A C 4B |
| R1093 | B C 4B |
| R1094 | A C 4B |
| R1095 | A C 5A |
| R1096 | A C 4A |
| R1097 | A C 4A |
| R1099 | A C 3A |
| R2001 | A C 4B |
| R2002 | A C 4B |
| R2003 | A C 4B |
| R2004 | A C 4B |
| R2005 | A C 4B |
| R2006 | A C 4B |
| R2007 | A C 4B |
| R2008 | A C 4B |
| R2009 | A C 3B |
| R2010 | A C 3B |
| R2011 | A C 4B |
| R2012 | A C 3B |
| R2013 | A C 4B |
| R2014 | A C 4B |
| R2015 | A C 4B |
| R2016 | A C 3B |
| R2017 | A C 3B |
| R2018 | A C 3B |
| R2101 | A C 5A |
| R2102 | A C 5A |
| R2105 | A C 5B |
| R2106 | A C 5B |
| R2107 | A C 4B |
| R2108 | A C 4B |
| R2109 | A C 4B |
| R2110 | A C 4B |
| R2111 | A C 4B |
| R2112 | A C 4B |
| R2113 | A C 4B |
| R2114 | A C 4B |
| R2201 | A C 5A |
| R2202 | A C 5A |
| R2203 | A C 5A |
| R2204 | A C 5A |
| R2206 | A C 5A |
| R2207 | A C 5A |
| R2208 | A C 5A |
| R2209 | A C 5A |
| R2210 | A C 5A |
| R2211 | A C 4A |
| R2212 | A C 5A |
| R2213 | A C 5A |
| R2217 | A C 5A |
| R2218 | A C 5A |
| R2219 | A C 5A |
| R2220 | A C 5A |
| R2221 | A C 5A |
| R2222 | A C 5A |
| R2223 | A C 5A |
| R2224 | A C 5A |
| R2225 | A C 5A |
| R2226 | A C 5A |
| R2229 | A C 5A |
| R2230 | A C 4A |
| R2231 | A C 4A |
| R2401 | A C 5A |
| R2402 | A C 5A |
| R2403 | A C 5A |
| R2404 | A C 5A |
| R2405 | A C 5A |
| R2406 | A C 5A |
| R2407 | A C 5A |
| R2601 | A C 5A |
| R2602 | A C 5A |
| R2607 | A C 5A |
| R2608 | A C 5A |
| R2609 | A C 5A |
| R2610 | A C 5A |
| R2611 | A C 5A |
| R2612 | A C 5A |
| R2613 | A C 5A |
| R2614 | A C 5A |
| R3002 | A C 2B |
| R3004 | A C 2A |
| R3005 | A C 3B |
| R3006 | A C 3B |
| R3007 | A C 2B |
| R3008 | A C 2B |
| R3009 | A C 2B |
| R3010 | A C 2B |
| R3011 | A C 2B |
| R3013 | A C 3A |
| R3014 | A C 3A |
| R3015 | A C 3A |
| R3016 | A C 2B |
| R3017 | A C 2B |
| R3018 | A C 2A |
| R3019 | A C 2A |
| R3020 | A C 2A |
| R3021 | A C 3A |
| R3022 | A C 3A |
| R3025 | A C 2A |
| R3026 | A C 2A |
| R3027 | A C 3B |
| R3029 | A C 3B |
| R3030 | A C 3B |
| R3031 | A C 3B |
| R3032 | A C 3B |
| R3034 | A C 3B |
| R3036 | A C 3A |
| R3037 | A C 3A |
| R3057 | A C 2A |
| R3066 | A C 2A |
| R3067 | A C 2A |

| REF.NO. | LOCATION |
|---|---|
| R3068 | A C 2A |
| R3069 | A C 2A |
| R3071 | A C 2A |
| R3072 | A C 2A |
| R3073 | A C 2A |
| R3074 | A C 2A |
| R3075 | A C 2B |
| R3081 | A C 3B |
| R3082 | A C 3B |
| R3083 | A C 3B |
| R3701 | B C 6B |
| R3702 | B C 5B |
| R3703 | B C 5A |
| R3704 | B C 5B |
| R3705 | B C 5B |
| R3706 | B C 5A |
| R3707 | B C 5A |
| R3708 | B C 6A |
| R3709 | B C 6A |
| R3710 | B C 5A |
| R3711 | B C 5A |
| R3712 | B C 5A |
| R3713 | B C 5A |
| R3714 | B C 5A |
| R3715 | B C 5A |
| R3722 | B C 5B |
| R3724 | B C 5B |
| R3725 | B C 5B |
| R3726 | B C 5B |
| R3727 | B C 5B |
| R3728 | B C 5B |
| R3730 | B C 5A |
| R3731 | B C 5A |
| R3732 | B C 5A |
| R3733 | B C 5A |
| R3734 | B C 5A |
| R3735 | B C 5A |
| R3736 | B C 5A |
| R3737 | B C 5A |
| R3738 | B C 5A |
| R3739 | B C 5A |
| R3740 | B C 5A |
| R3741 | B C 5A |
| R3742 | B C 6A |
| R3743 | B C 6A |
| R3744 | B C 5A |
| R3745 | B C 5A |
| R3746 | B C 5A |
| R3747 | B C 5A |
| R3748 | B C 5A |
| R3801 | A C 5B |
| R3802 | A C 5B |
| R3803 | A C 5B |
| R3804 | A C 5B |
| R3805 | A C 5B |
| R3806 | A C 5B |
| R3807 | B C 5B |
| R3808 | B C 5B |
| R3809 | B C 5B |
| R3851 | B C 5B |
| R3852 | B C 5B |
| R3853 | B C 5B |
| R3854 | B C 5B |
| R3855 | B C 5B |
| R4201 | A C 4B |
| R4202 | A C 3B |
| R4203 | A C 3B |
| R4204 | A C 3B |
| R4205 | A C 3C |
| R4301 | A C 3C |
| R4302 | A C 3C |
| R4303 | A C 3C |
| R4304 | A C 3C |
| R4305 | A C 2C |
| R4306 | A C 3C |
| R4307 | A C 3C |
| R4308 | A C 3C |
| R4309 | A C 3B |
| R4310 | A C 3B |
| R4311 | A C 3B |
| R4312 | A C 3B |
| R4314 | A C 3C |
| R4315 | A C 3C |
| R4316 | A C 3C |
| R4317 | A C 3C |
| R4318 | A C 3C |
| R4319 | A C 3C |
| R4320 | A C 2B |
| R4321 | A C 2B |
| R4326 | A C 3C |
| R4327 | A C 3C |
| R4328 | A C 2C |
| R4329 | A C 2C |
| R4330 | A C 2C |
| R4331 | A C 2C |
| R4332 | A C 2C |
| R4333 | A C 3C |
| R4334 | A C 3C |
| R4335 | A C 2C |
| R4336 | A C 2B |
| R4337 | A C 2B |
| R4338 | A C 2B |
| R4339 | A C 3C |
| R4340 | A C 3B |
| R4341 | A C 3B |
| R4342 | A C 3B |
| R4343 | A C 3B |
| R4344 | A C 3B |
| R4345 | A C 3B |
| R4346 | A C 3B |
| R4347 | A C 3B |
| R4348 | A C 2B |
| R4349 | A C 3C |
| R4350 | A C 3C |
| R4351 | A C 2B |
| R4352 | A C 2C |
| R4353 | A C 3B |
| R4354 | A C 3B |

| REF.NO. | LOCATION |
|---|---|
| R4355 | A C 3C |
| R4356 | A C 3C |
| R4804 | B C 5C |
| R4805 | B C 5C |
| R4806 | B C 6C |
| R4807 | B C 6C |
| R4808 | B C 5C |
| R4809 | B C 5C |
| R4810 | B C 5C |
| R4811 | B C 5C |
| R4812 | B C 5C |
| R4813 | B C 5C |
| R4814 | B C 5C |
| R4815 | B C 5C |
| R4816 | B C 5C |
| R4817 | B C 5C |
| R4818 | B C 5C |
| R4819 | B C 5C |
| R4820 | B C 5C |
| R4821 | B C 5C |
| R4822 | B C 5C |
| R4823 | B C 5C |
| R4824 | B C 5C |
| R4825 | B C 5B |
| R4826 | B C 5C |
| R4827 | B C 5C |
| R4828 | B C 5C |
| R4829 | B C 5C |
| R4830 | B C 5B |
| R4831 | B C 5C |
| R4833 | B C 5C |
| R4836 | B C 5C |
| R4837 | B C 5C |
| R4839 | B C 5C |
| R4840 | B C 5C |
| R4841 | B C 5B |
| R4842 | B C 5C |
| R4843 | B C 4C |
| R4844 | B C 5C |
| R4845 | B C 5C |
| R4846 | B C 5B |
| R4847 | B C 5C |
| R4849 | B C 5B |
| R4850 | B C 5C |
| R4852 | A C 5B |
| R4854 | A C 5B |
| R4855 | A C 5B |
| R4856 | A C 5B |
| R4857 | A C 5C |
| R4858 | A C 5C |
| R4859 | A C 5C |
| R4860 | A C 5C |
| R4862 | A C 5C |
| R4863 | A C 5B |
| R4864 | A C 5B |
| R4865 | A C 5B |
| R4866 | A C 5B |
| R4867 | A C 5B |
| R4868 | A C 5B |
| R4870 | A C 5C |
| R4871 | A C 5B |
| R4872 | A C 5C |
| R4873 | A C 5C |
| R4874 | A C 5C |
| R4875 | A C 5C |
| R4876 | A C 5C |
| R5501 | A C 4B |
| R5502 | A C 4B |
| R5503 | A C 4C |
| R5504 | A C 4C |
| R5505 | A C 4C |
| R5506 | A C 4B |
| R5507 | A C 4B |
| R5509 | A C 4B |
| R5511 | A C 4B |
| R5512 | A C 4C |
| R5513 | A C 4C |
| R5514 | A C 4C |
| R6021 | B C 2A |
| R6022 | B C 2A |
| R6023 | B C 2A |
| R6024 | B C 2A |
| R6025 | B C 2A |
| R6026 | B C 2A |
| R6027 | B C 2A |
| R6028 | B C 2A |
| R6029 | B C 2A |
| R6030 | B C 2A |
| R6031 | B C 2A |
| R6032 | B C 2A |
| R6033 | B C 2A |
| R6034 | B C 1A |
| R6035 | B C 1A |
| R6036 | B C 1A |
| R6037 | B C 1A |
| R6038 | B C 1A |
| R6039 | B C 1A |
| R6040 | B C 1A |
| R6041 | B C 2A |
| R6042 | A C 1C |
| R6043 | B C 2A |
| R6044 | B C 1A |
| R6102 | B C 1A |
| R6103 | B C 1A |
| R6104 | B C 1A |
| R6105 | A C 2A |
| R6106 | A C 2A |
| R6107 | B C 1A |
| R6108 | B C 1A |
| R6109 | A C 2A |
| R6202 | B C 1A |
| R6203 | B C 1A |
| R6302 | B C 1A |
| R6303 | B C 1A |
| R6305 | A C 2A |
| R6306 | A C 2A |
| R6307 | A C 2A |
| R6308 | A C 2A |

| REF.NO. | LOCATION |
|---|---|
| R6309 | A C 2A |
| R6402 | B C 1A |
| R6403 | B C 1A |
| R6405 | B C 1A |
| R6406 | B C 1A |
| R6407 | B C 1A |
| R6502 | B C 1A |
| R6503 | B C 1A |
| R6505 | B C 1A |
| R6506 | B C 1A |
| R6602 | B C 1A |
| R6603 | B C 1A |
| R6604 | B C 1A |
| R6605 | B C 1A |
| R6606 | B C 1B |
| R6607 | B C 1B |
| R6608 | B C 1B |
| R6609 | B C 1B |
| R6610 | B C 1B |
| R6611 | B C 1B |
| R6612 | B C 1B |
| R6613 | B C 1B |
| R6614 | B C 1B |
| R6615 | B C 1B |
| R6616 | B C 1A |
| R6617 | B C 2B |
| R6618 | B C 2B |
| R6619 | A C 1B |
| R6701 | B C 2C |
| R6702 | B C 1A |
| R6703 | B C 1A |
| R6704 | B C 1A |
| R6705 | B C 1A |
| R6706 | B C 1A |
| R6707 | B C 1A |
| R6801 | B C 1C |
| R6802 | B C 1C |
| R6803 | B C 1C |
| R6804 | B C 2B |
| R6805 | B C 1B |
| R6806 | B C 2C |
| R6807 | B C 2C |
| R6808 | B C 2B |
| R6809 | B C 2C |
| R6810 | B C 2C |
| R6811 | B C 1C |
| R6812 | B C 1C |
| R6813 | B C 2B |
| R6815 | B C 1C |
| R8001 | B C 4B |
| R8002 | B C 4B |
| R8003 | B C 4B |
| R8004 | B C 3B |
| R8005 | B C 3B |
| R8006 | B C 3B |
| R8007 | B C 3C |
| R8008 | B C 3B |
| R8009 | B C 3C |
| R8010 | B C 3B |
| R8016 | B C 3C |
| R8017 | B C 4B |
| R8020 | B C 3C |
| R8022 | B C 3B |
| R8025 | B C 3C |
| R8026 | B C 4B |
| R8027 | B C 3B |
| R8028 | B C 3B |
| R8029 | B C 3B |
| R8030 | B C 3B |
| R8031 | B C 3B |
| R8032 | B C 3B |
| R8036 | B C 4B |
| R8037 | B C 3B |
| R8038 | B C 4B |
| R8043 | B C 4B |
| R8046 | B C 3B |
| R8051 | B C 3C |
| R8054 | B C 3C |
| R8055 | B C 3C |
| R8056 | B C 3B |
| R8057 | B C 3C |
| R8058 | B C 3C |
| R8059 | B C 3C |
| R8060 | B C 4B |
| R8063 | B C 4B |
| R8064 | B C 3B |
| R8065 | B C 3B |
| R8066 | B C 3C |
| R8067 | B C 3B |
| R8068 | B C 3B |
| R8069 | B C 3B |
| R8070 | B C 4B |
| R8071 | B C 4B |
| R8072 | B C 4B |
| R8074 | B C 4B |
| R8075 | B C 4B |
| R8301 | B C 2C |
| R8302 | B C 2C |
| R8303 | B C 2C |
| R8305 | B C 2B |
| R8306 | B C 3B |
| R8307 | B C 3B |
| R8308 | B C 3B |
| R8309 | B C 2B |
| R8310 | B C 3C |
| R8311 | B C 2C |
| R8312 | B C 2C |
| R8313 | B C 2C |
| R8314 | B C 2C |
| R8701 | B C 2B |
| R8702 | B C 3B |
| R8703 | B C 3B |
| R8704 | B C 3B |
| R8705 | B C 3B |
| R8706 | B C 3B |
| R8707 | B C 2B |
| R8708 | B C 2B |
| R8709 | B C 2B |



| REF.NO. | LOCATION |
|---|---|
| R8710 | B C 2B |
| R8711 | B C 2B |
| R8712 | B C 2B |
| R8713 | B C 2B |
| R8715 | B C 3B |
| R8716 | B C 2B |
| R8717 | B C 2C |
| R8718 | B C 3B |
| R8719 | B C 2B |
| R8720 | B C 2B |
| R8721 | B C 2B |
| R8722 | B C 3B |
| R8723 | B C 3B |
| R8724 | B C 2B |
| RA1001 | B C 4A |
| RA1002 | A C 4B |
| RA1004 | A C 4B |
| RA1005 | A C 4B |
| RA1006 | A C 4B |
| RA1007 | A C 4B |
| RA1008 | A C 4A |
| RA3001 | A C 3B |
| RA3002 | A C 3B |
| RA3003 | A C 3B |
| RA3004 | A C 2A |
| RA3005 | A C 2A |
| RA8001 | B C 3B |
| RA8002 | B C 3B |
| RA8003 | B C 3B |
| RA8004 | B C 3B |
| | |
| **OTHER** | |
| J501 | A C 1B |
| J502 | A D 1B |
| TL1001 | A C 3A |
| TL1002 | A C 4B |
| TL1003 | A C 3A |
| TL1004 | A C 4A |
| TL1005 | A C 3A |
| TL1006 | A C 3A |
| TL1014 | A C 3A |
| TL1021 | A C 2B |
| TL1022 | A C 2B |
| TL1023 | A C 2B |
| TL1024 | A C 2B |
| TL1025 | A C 2A |
| TL1026 | A C 4B |
| TL1029 | A C 4B |
| TL1030 | A C 4A |
| TL1034 | A C 4A |
| TL1036 | A C 4A |
| TL1037 | A C 4A |
| TL1038 | A C 4A |
| TL3001 | A C 2B |
| TL3006 | A C 2B |
| TL3007 | A C 3A |
| TL3008 | A C 3A |
| TL3009 | A C 3A |
| TL3011 | A C 3A |
| TL3801 | A C 5B |
| TL3802 | A C 5B |
| TL3805 | A C 5B |
| TL4201 | A C 4C |
| TL4301 | A C 3B |
| TL4302 | A C 3B |
| TL4303 | A C 2B |
| TL4312 | A C 2B |
| TL4313 | A C 2B |
| TL4314 | A C 2B |
| TL4315 | A C 2B |
| TL8001 | B C 4B |
| TL8002 | B C 4B |
| TL8003 | B C 3B |
| TL8004 | B C 4B |
| TL8005 | B C 3B |
| TL8006 | B C 3B |
| TL8007 | B C 4B |
| TL8008 | B C 3C |
| TL8013 | B C 4C |
| TL8014 | B C 3B |
| TL8016 | B C 4B |
| TL8017 | B C 3B |
| TL8018 | B C 4B |
| TL8020 | B C 4B |
| TL8021 | B C 4B |
| TM1 | A C 6A |
| TM2 | A C 6A |
| TM5 | A C 1A |
| TP110 | B C 5B |
| X1001 | A C 4B |
| X1002 | A C 4A |
| X3002 | A C 3B |
| X5501 | A C 4B |
| X8002 | B C 4B |
| X8301 | B C 2C |
| X8701 | B C 3B |
| X8702 | B C 2B |

## COMPONENT PARTS LOCATION GUIDE <PREMDA> YB 10405-01-01

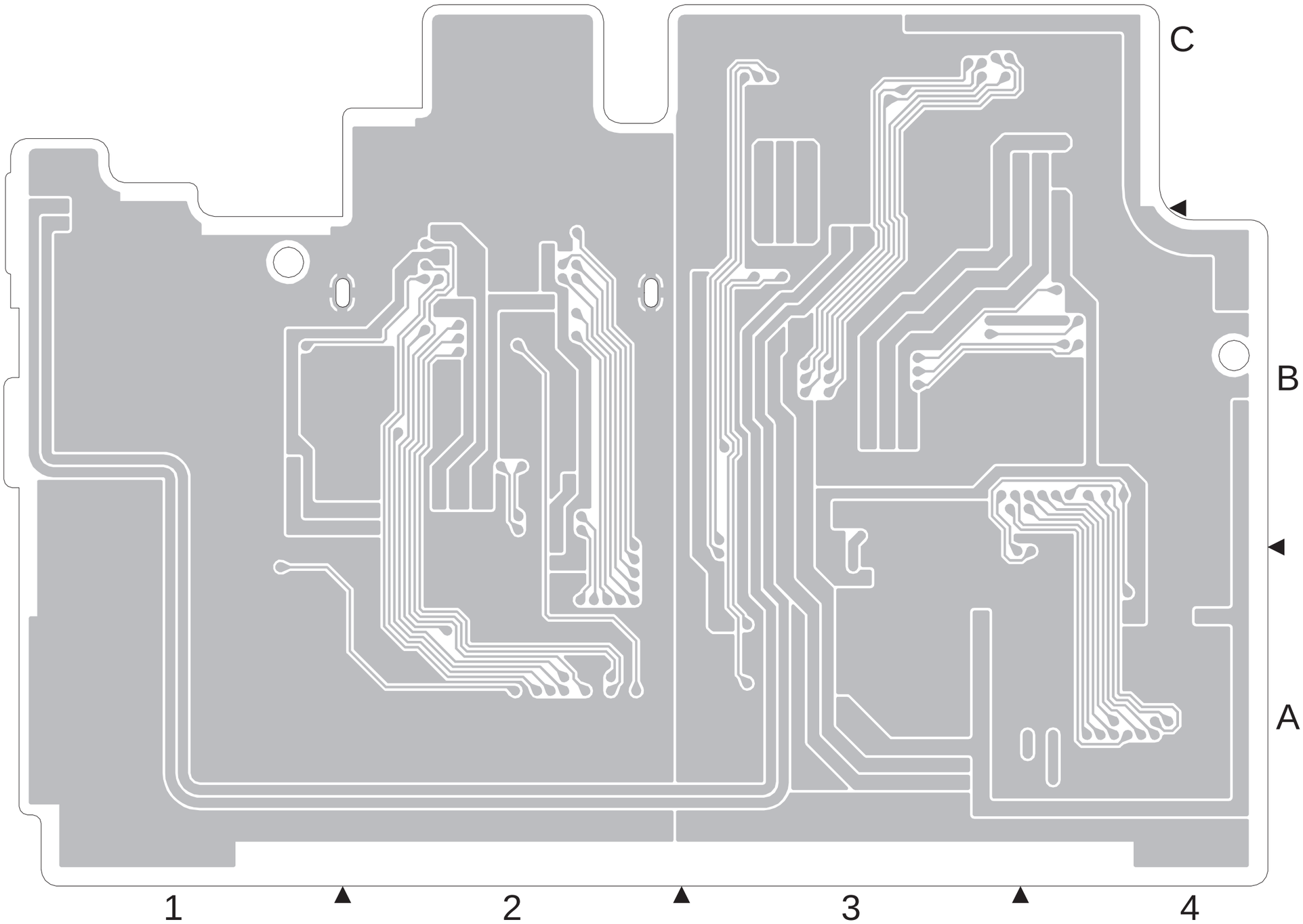
| REF.NO. | LOCATION |
|---|---|
| **CAPACITOR** | |
| C1601 | A C 1B |
| C1602 | A C 3B |
| C1603 | A C 3B |
| C1605 | A C 3B |
| C1606 | A C 3B |
| C1607 | A C 4B |
| C1614 | A C 3C |
| C1615 | A C 3B |
| C1616 | A C 3B |
| C1617 | A C 3B |
| C1618 | A C 3B |
| C1619 | A C 3B |
| C1620 | A C 3B |
| C1621 | A C 3C |
| C1622 | A C 4B |
| C1623 | A C 4B |
| C1624 | A C 3B |
| C1625 | A C 3B |
| C1626 | A C 3B |
| C1627 | A C 3B |
| C1628 | A C 3B |
| C1629 | A C 4B |
| C1630 | A C 3B |
| C1631 | A C 3A |
| C1632 | A C 3A |
| C1633 | A C 4B |
| C1641 | A C 3A |
| C1643 | A C 3C |
| C1644 | A C 3C |
| C1645 | A C 3C |
| C1701 | A C 3A |
| C1702 | A C 4A |
| C3501 | A C 2B |
| C3502 | A C 2B |
| C3503 | A C 2B |
| C3504 | A C 2B |
| C3505 | A C 2B |
| C3506 | A C 2B |
| C3507 | A C 2B |
| C3508 | A C 2C |
| C3509 | A C 2B |
| C3510 | A C 2B |
| C3511 | A C 2C |
| C3512 | A C 2B |
| C3513 | A C 2B |
| C3514 | A C 2B |
| C3515 | A C 2B |
| C3516 | A C 2B |
| C3517 | A C 2B |
| C3518 | A C 2B |
| C3519 | A C 2B |
| C3520 | A C 2B |
| C3521 | A C 2B |
| C3522 | A C 2B |
| C3523 | A C 2B |
| C3524 | A C 2B |
| C3525 | A C 2B |
| C3526 | A C 2B |
| C3527 | A C 2B |
| C3528 | A C 1B |
| C3530 | A C 1B |
| | |
| **CONNECTOR** | |
| CN401 | A C 2A |
| CN402 | A C 2C |
| CN403 | A C 1B |
| CN404 | A C 3C |
| CN405 | A C 3C |
| CN406 | A C 3B |
| CN407 | A C 1B |
| CN408 | A C 3A |
| | |
| **DIODE** | |
| D1602 | A C 1B |
| D1603 | A C 4B |
| D1604 | A C 3A |
| | |
| **FUSE** | |
| F1601 | A C 3A |
| F1602 | A C 3A |
| | |
| **IC** | |
| IC1601 | A C 3B |
| IC1701 | A C 3A |
| IC1702 | A C 4A |
| IC3501 | A C 2B |
| IC3502 | A C 1B |
| | |
| **COIL** | |
| L3501 | A C 2A |
| L3502 | A C 2A |
| L3503 | A C 2A |
| L3504 | A C 2A |
| L3505 | A C 2A |
| | |
| **TRANSISTOR** | |
| Q1601 | A C 4B |
| | |
| **RESISTOR** | |
| R1601 | A C 3B |
| R1602 | A C 3B |
| R1603 | A C 3B |
| R1604 | A C 3B |
| R1610 | A C 3C |
| R1611 | A C 4C |
| R1612 | A C 3B |
| R1613 | A C 3B |
| R1614 | A C 3C |
| R1615 | A C 3C |
| R1616 | A C 3B |
| R1617 | A C 3B |
| R1618 | A C 3B |
| R1620 | A C 3B |
| R1621 | A C 3B |
| R1622 | A C 3B |
| R1624 | A C 3B |
| R1625 | A C 3C |

| REF.NO. | LOCATION |
|---|---|
| R1629 | A C 3B |
| R1630 | A C 4B |
| R1631 | A C 4B |
| R1632 | A C 3B |
| R1633 | A C 3B |
| R1634 | A C 3B |
| R1635 | A C 4B |
| R1636 | A C 4B |
| R1637 | A C 4B |
| R1638 | A C 3C |
| R1639 | A C 4B |
| R1640 | A C 4B |
| R1641 | A C 4B |
| R1642 | A C 4B |
| R1648 | A C 3B |
| R1701 | A C 3A |
| R1702 | A C 3A |
| R1703 | A C 4A |
| R1704 | A C 3A |
| R1705 | A C 3A |
| R1706 | A C 3A |
| R1707 | A C 4A |
| R1708 | A C 4A |
| R1709 | A C 4A |
| R1710 | A C 4A |
| R1711 | A C 4A |
| R1712 | A C 4A |
| R3501 | A C 2B |
| R3502 | A C 2B |
| R3503 | A C 2C |
| R3504 | A C 2C |
| R3505 | A C 2C |
| R3506 | A C 2C |
| R3507 | A C 2C |
| R3508 | A C 2C |
| R3509 | A C 2B |
| R3510 | A C 2B |
| R3511 | A C 1B |
| R3512 | A C 1B |
| | |
| **OTHER** | |
| TL1601 | A C 3A |
| TL1602 | A C 3A |
| TL1605 | A C 3B |
| TL1606 | A C 3A |
| TL1607 | A C 3B |
| TL1608 | A C 3C |
| TL1609 | A C 3B |
| TL1610 | A C 3B |
| TL1612 | A C 4B |
| TL1613 | A C 3B |
| TL1617 | A C 4B |
| TL1618 | A C 4B |
| TL1619 | A C 4B |
| TL1620 | A C 3A |
| TL3501 | A C 2A |
| TM2 | A C 4C |
| TM4 | A C 4C |
| ZP1-1 | A C 2B |
| ZP3-3 | A C 1B |
| ZP3-5 | A C 1B |
| ZP4-1 | A C 3C |
| ZP4-2 | A C 3A |
| ZP4-3 | A C 3C |
| ZP4-5 | A C 3C |
| ZP4-7 | A C 3C |
| ZP4-9 | A C 3C |
| ZP5-1 | A C 3C |
| ZP5-2 | A C 3C |
| ZP5-3 | A C 3C |
| ZP5-4 | A C 3C |
| ZP5-5 | A C 4C |
| ZP5-6 | A C 3C |
| ZP5-7 | A C 3C |
| ZP5-8 | A C 3C |
| ZP5-9 | A C 4C |
| ZP6-1 | A C 4B |
| ZP6-3 | A C 3A |
| ZP7-4 | A C 1B |
| ZP4-10 | A C 3C |
| ZP4-11 | A C 3C |
| ZP5-11 | A C 4C |
| ZP5-13 | A C 4C |
| ZP5-16 | A C 3C |
| ZP5-17 | A C 4C |
| ZP5-18 | A C 4C |
| ZP6-10 | A C 3B |
| ZP6-12 | A C 3B |
| ZP6-14 | A C 4B |
| ZP6-16 | A C 4B |
| ZP8-21 | A C 3A |

## ■ PREMDA CIRCUIT BOARD

**<05> PREMDA**
**YB 10405-01-01**

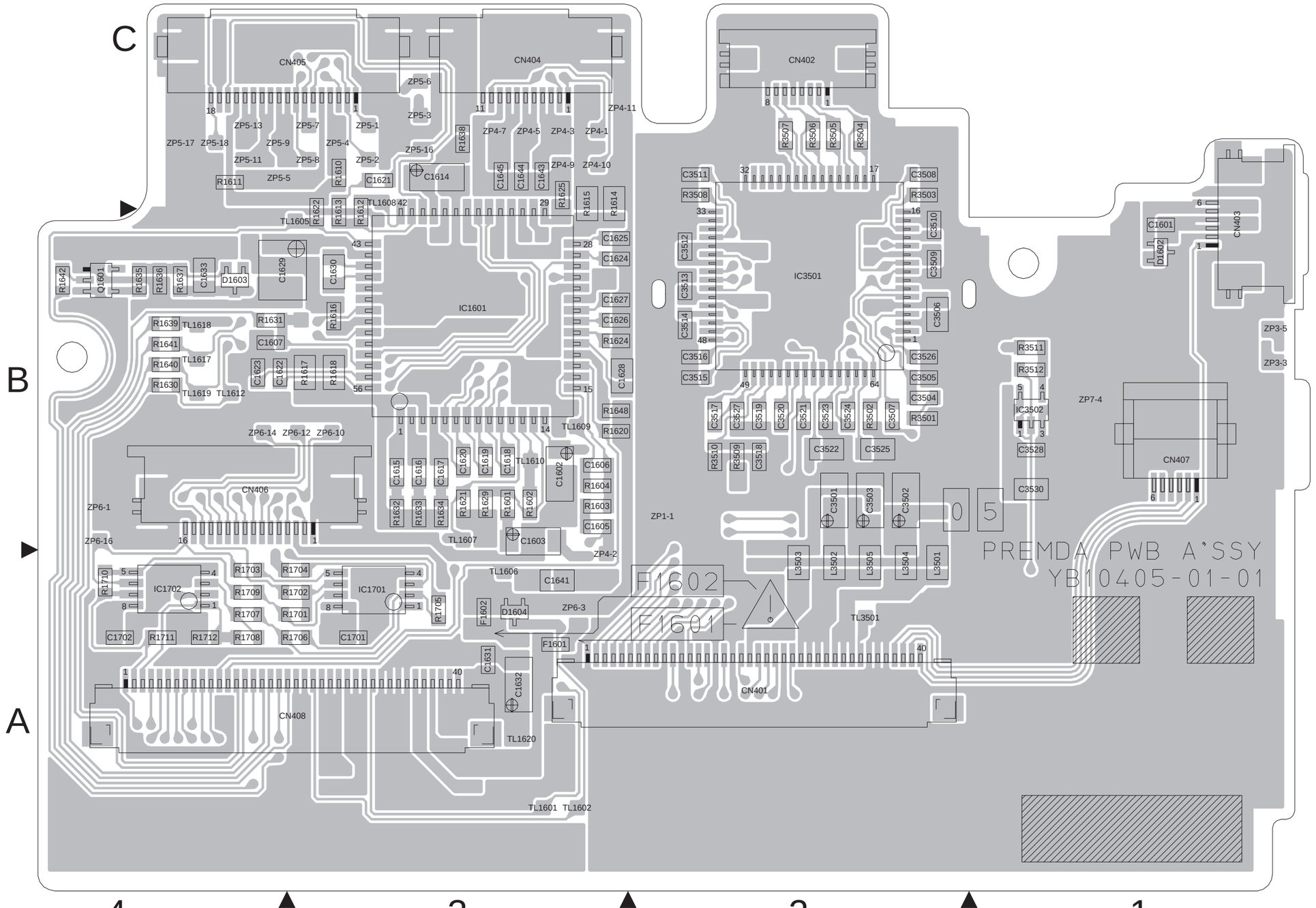
**FOIL SIDE(B)**



## ■ PREMDA CIRCUIT BOARD

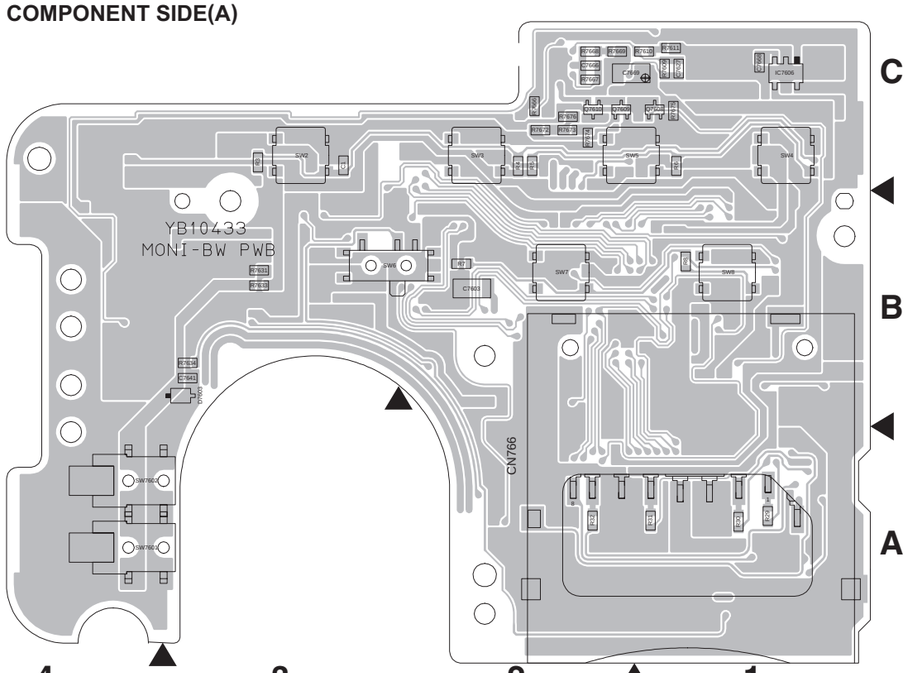
**<05> PREMDA**
**YB 10405-01-01**

**COMPONENT SIDE(A)**

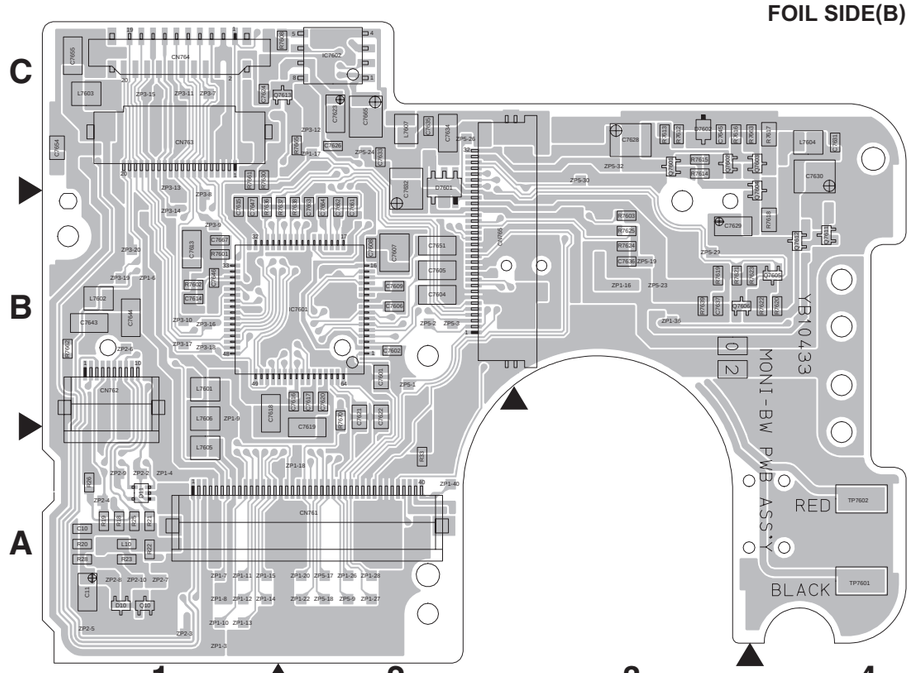


## ■ MONI-BW CIRCUIT BOARD

**COMPONENT SIDE(A)**




**FOIL SIDE(B)**




**<02> MONI-BW**
**YB 10433**

**<02> MONI-BW**
**YB 10433**

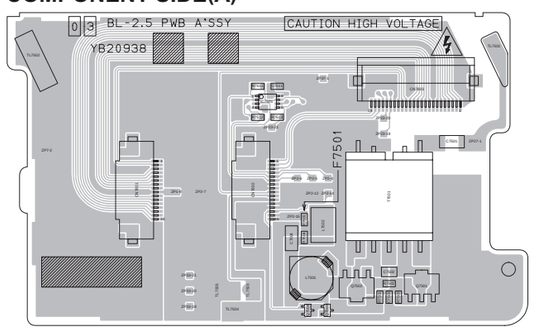
### COMPONENT PARTS LOCATION GUIDE <MONI-BW> YB10433

| REF.NO. | LOCATION | REF.NO. | LOCATION | REF.NO. | LOCATION | REF.NO. | LOCATION | REF.NO. | LOCATION | REF.NO. | LOCATION | REF.NO. | LOCATION | REF.NO. | LOCATION | REF.NO. | LOCATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **CAPACITOR** | | C7627 | A C 1C | C7667 | B C 1B | L7601 | B C 1B | R5 | A C 2C | R7613 | B C 3C | R7667 | A C 2C | ZP1-3 | B C 1A | ZP1-15 | B C 1A | ZP5-23 | B C 3B |
| C1 | A C 3C | C7628 | B C 3C | C7668 | A C 1C | L7602 | B C 1B | R6 | A C 1C | R7614 | B C 3C | R7668 | A C 2C | ZP1-4 | B C 1A | ZP1-16 | B C 3B | ZP5-24 | B C 2C |
| C10 | B C 1A | C7629 | B C 3B | C7669 | A C 2C | L7603 | B C 1C | R7 | A C 2B | R7615 | B C 3C | R7669 | A C 2C | ZP1-6 | B C 1B | ZP1-17 | B C 2C | ZP5-26 | B C 2C |
| C11 | B C 1A | C7630 | B C 4C | | | L7604 | B C 4C | R8 | A C 1B | R7616 | B C 3C | R7670 | B C 2B | ZP1-7 | B C 1A | ZP1-18 | B C 2A | ZP5-29 | B C 3B |
| C7601 | B C 2B | C7631 | B C 4C | **CONNECTOR** | | L7605 | B C 1A | R18 | B C 1A | R7617 | B C 4C | R7672 | A C 2C | ZP1-8 | B C 1A | ZP1-20 | B C 2A | ZP5-30 | B C 3C |
| C7602 | B C 2B | C7632 | B C 2C | CN761 | B C 1A | L7606 | B C 1B | R19 | B C 1A | R7618 | B C 4B | R7673 | A C 2C | ZP1-9 | B C 1B | ZP1-22 | B C 2A | ZP5-32 | B C 3C |
| C7603 | A C 2B | C7633 | B C 2C | CN762 | B C 1B | L7607 | B C 2C | R20 | B C 1A | R7619 | B C 3B | R7674 | A C 2C | ZP2-2 | B C 1A | ZP1-26 | B C 2A | | |
| C7604 | B C 2B | C7634 | B C 2C | CN763 | B C 1C | | | R21 | B C 1A | R7620 | B C 4B | R7675 | A C 1C | ZP2-3 | B C 1A | ZP1-27 | B C 2A | | |
| C7605 | B C 2B | C7635 | B C 2C | CN764 | B C 1C | **TRANSISTOR** | | R22 | B C 1A | R7621 | B C 3B | R7676 | A C 2C | ZP2-4 | B C 1A | ZP1-28 | B C 2A | | |
| C7606 | B C 2B | C7636 | B C 3B | CN765 | B C 2B | Q10 | B C 1A | R23 | B C 1A | R7622 | B C 4B | | | ZP2-5 | B C 1A | ZP1-36 | B C 3B | | |
| C7607 | B C 2B | C7637 | B C 3B | CN766 | A C 1A | Q7601 | B C 3C | R25 | B C 1A | R7623 | B C 4B | **OTHER** | | ZP2-6 | B C 1B | ZP1-40 | B C 2A | | |
| C7608 | B C 2B | C7641 | A C 3B | | | Q7602 | B C 3C | R26 | B C 1A | R7624 | B C 3B | SW2 | A C 3C | ZP2-7 | B C 1A | ZP2-10 | B C 1A | | |
| C7609 | B C 2B | C7643 | B C 1B | **DIODE** | | Q7603 | B C 4C | R28 | B C 1A | R7625 | B C 3B | SW3 | A C 2C | ZP2-8 | B C 1A | ZP3-10 | B C 1B | | |
| C7613 | B C 1B | C7644 | B C 1B | D10 | B C 1A | Q7604 | B C 4C | R29 | A C 1A | R7630 | B C 1C | SW4 | A C 1C | ZP2-9 | B C 1A | ZP3-11 | B C 1C | | |
| C7614 | B C 1B | C7645 | B C 3C | D11 | B C 1A | Q7605 | B C 4B | R30 | A C 1A | R7631 | A C 3B | SW5 | A C 2C | ZP3-7 | B C 1C | ZP3-12 | B C 2C | | |
| C7615 | B C 1B | C7646 | B C 1B | D7601 | B C 2C | Q7606 | B C 4B | R31 | A C 1A | R7633 | A C 3B | SW6 | A C 3B | ZP3-8 | B C 1B | ZP3-13 | B C 1C | | |
| C7616 | B C 2B | C7647 | B C 1B | D7602 | B C 3C | Q7608 | A C 1C | R32 | A C 2A | R7634 | A C 3B | SW7 | A C 2B | ZP3-9 | B C 1B | ZP3-14 | B C 1B | | |
| C7617 | B C 2B | C7651 | B C 2B | D7603 | A C 3B | Q7609 | A C 2C | R33 | B C 2A | R7636 | B C 1B | SW8 | A C 1B | ZP5-1 | B C 2B | ZP3-15 | B C 1C | | |
| C7618 | B C 1B | C7654 | B C 1C | | | Q7610 | A C 2C | R7601 | B C 1B | R7637 | B C 2B | SW7601 | A C 4A | ZP5-2 | B C 2B | ZP3-16 | B C 1B | | |
| C7619 | B C 1B | C7655 | B C 1C | **IC** | | Q7611 | B C 4B | R7602 | B C 1B | R7638 | B C 2B | SW7602 | A C 4A | ZP5-3 | B C 2B | ZP3-17 | B C 1B | | |
| C7620 | B C 2B | C7661 | B C 2B | IC7601 | B C 2B | Q7612 | B C 4B | R7603 | B C 3B | R7639 | B C 3B | TM1 | A C 4A | ZP5-9 | B C 2A | ZP3-18 | B C 1B | | |
| C7621 | B C 2B | C7662 | B C 2B | IC7602 | B C 2C | Q7613 | B C 2C | R7608 | B C 2C | R7661 | B C 1C | TM5 | A C 4A | ZP1-10 | B C 1A | ZP3-19 | B C 1B | | |
| C7622 | B C 2B | C7663 | B C 2B | IC7606 | A C 1C | | | R7609 | A C 1C | R7662 | B C 1B | TM13 | A C 4A | ZP1-11 | B C 1A | ZP3-20 | B C 1B | | |
| C7623 | B C 2C | C7664 | B C 2B | | | **RESISTOR** | | R7610 | A C 1C | R7663 | B C 4C | TM17 | A C 3A | ZP1-12 | B C 1A | ZP5-17 | B C 2A | | |
| C7624 | B C 1C | C7665 | B C 2C | **COIL** | | R3 | A C 3C | R7611 | A C 1C | R7665 | B C 2C | TP7601 | B C 4A | ZP1-13 | B C 1A | ZP5-18 | B C 2A | | |
| C7626 | B C 2C | C7666 | A C 2C | L10 | B C 1A | R4 | A C 2C | R7612 | B C 3C | R7666 | A C 2C | TP7602 | B C 4A | ZP1-14 | B C 1A | ZP5-19 | B C 3B | | |

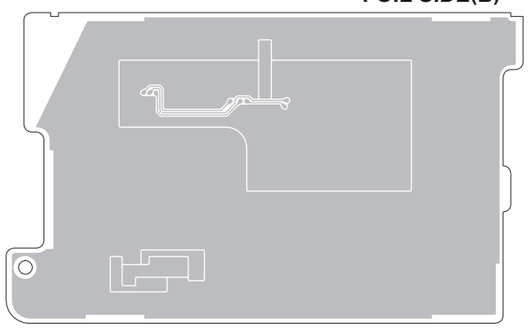


## ■ BL-2.5 CIRCUIT BOARD

**COMPONENT SIDE(A)**




**FOIL SIDE(B)**

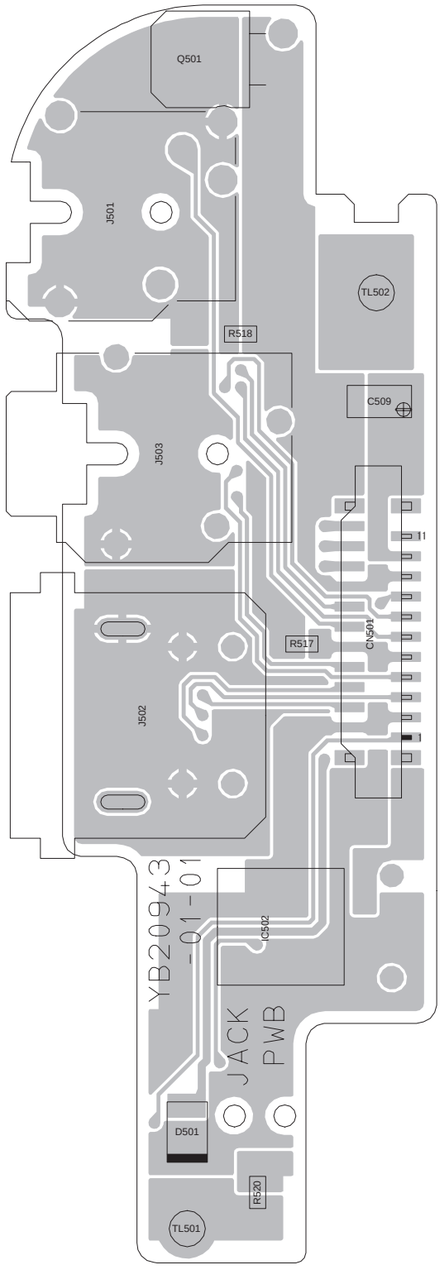


**<03> BL-2.5**
**YB 20938**

**<03> BL-2.5**
**YB 20938**

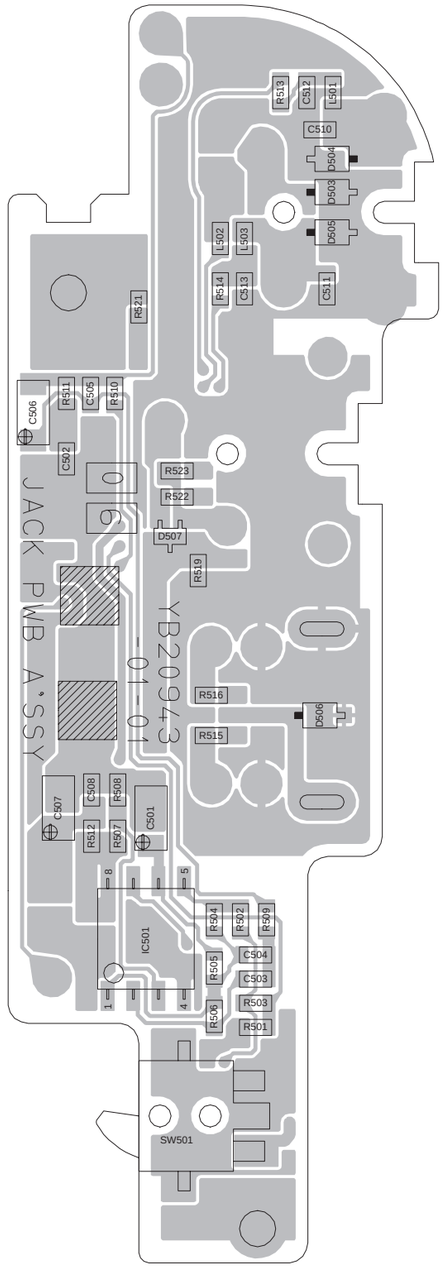
## ■ JACK CIRCUIT BOARD

**COMPONENT SIDE(A)**




**<06> JACK**
**YB 20943-01-01**

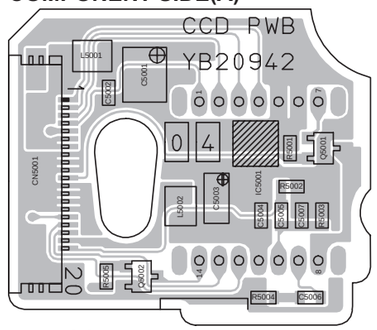
**FOIL SIDE(B)**




**<06> JACK**
**YB 20943-01-01**

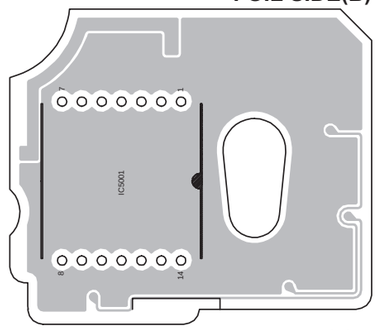
## ■ CCD CIRCUIT BOARD

**COMPONENT SIDE(A)**




**<04> CCD**
**YB 20942**

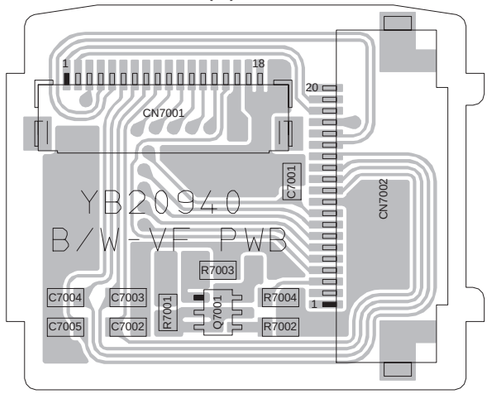
**FOIL SIDE(B)**




**<04> CCD**
**YB 20942**

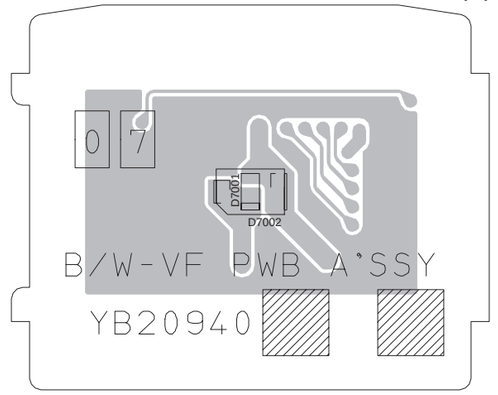
## ■ B/W-VF CIRCUIT BOARD

**COMPONENT SIDE(A)**



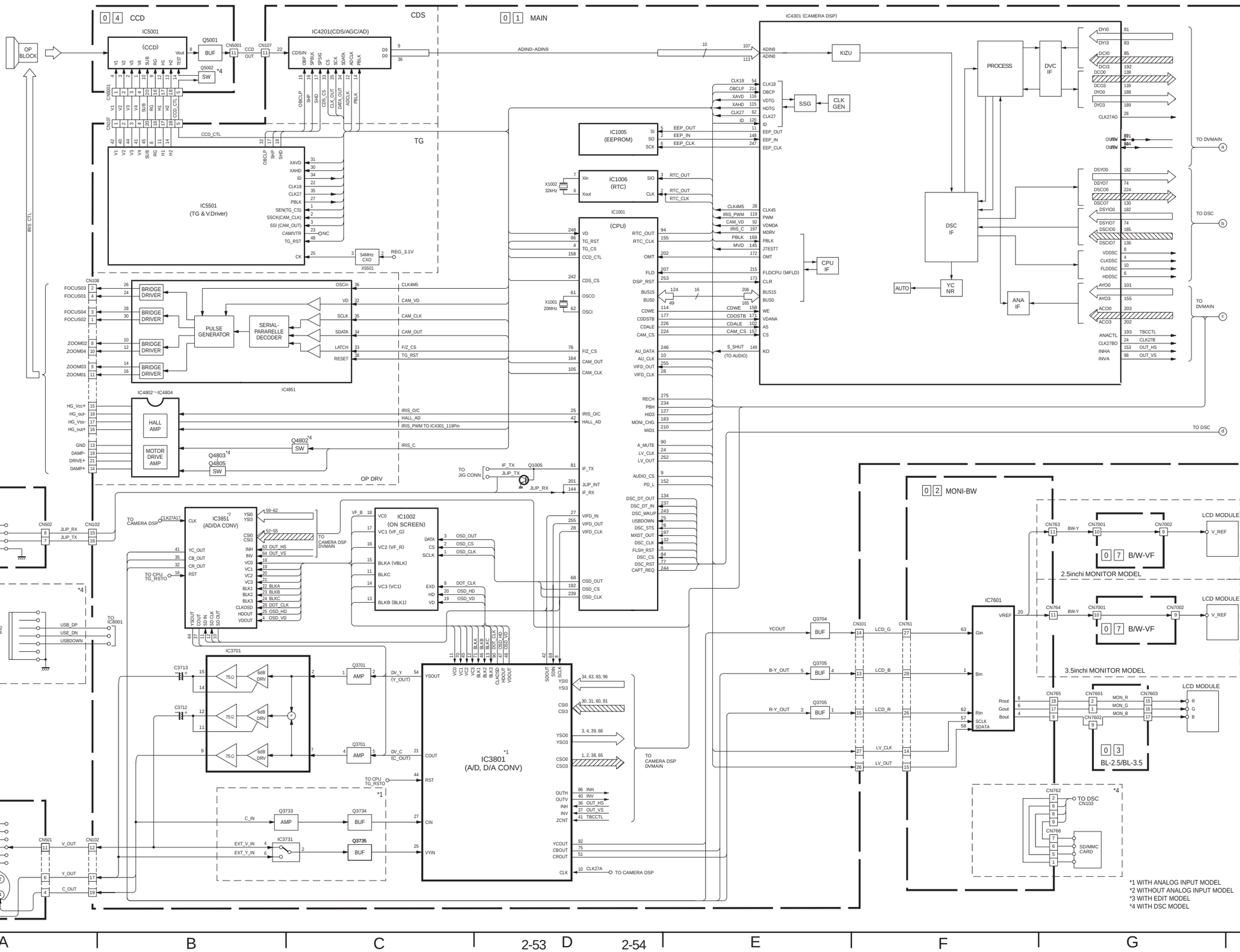

**<07> B/W-VF**
**YB 20940**

**FOIL SIDE(B)**

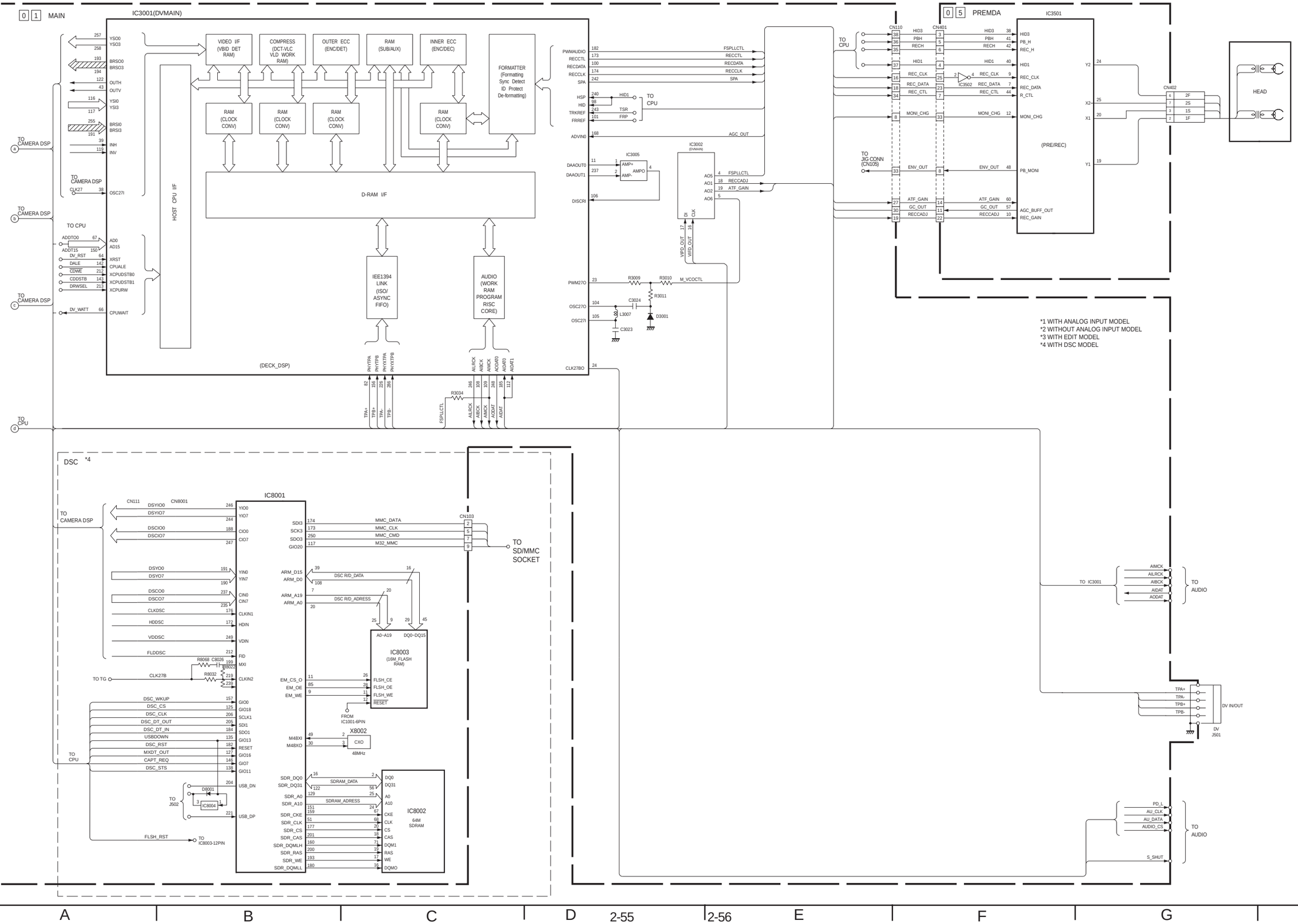



**<07> B/W-VF**
**YB 20940**

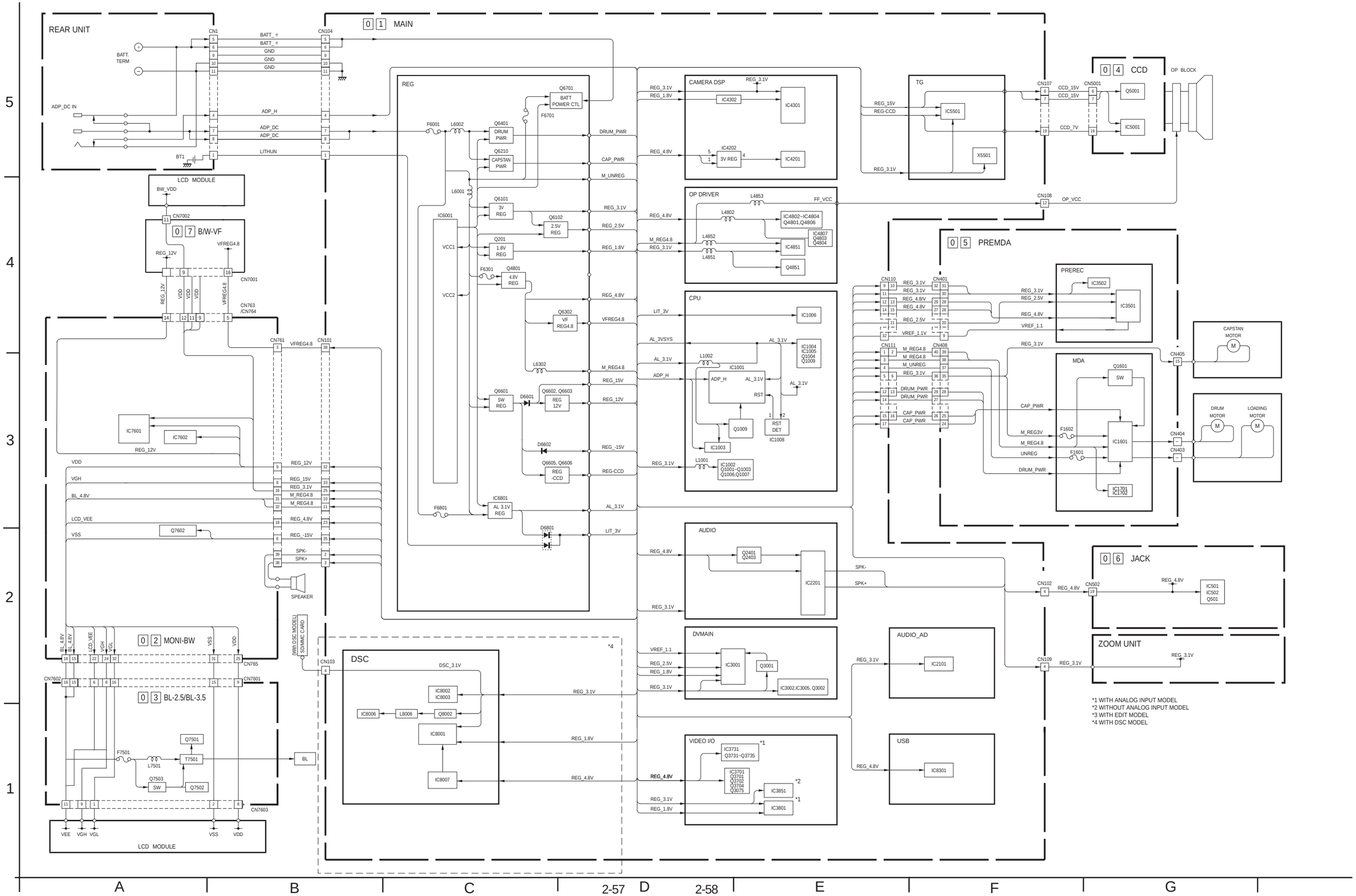
# ■ VIDEO BLOCK DIAGRAM (1/2)



# ■ VIDEO BLOCK DIAGRAM (2/2)



# ■ POWER SYSTEM BLOCK DIAGRAM




1 2 3 4 5

A B C 2-57 D 2-58 E F G

# ■ VOLTAGE CHARTS

<MAIN IF>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| Q2001 | | |
| 1 | 0 | 0 |
| 2 | 0.5 | 0.5 |
| 3 | 3.0 | 3.0 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| Q2002 | | |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 0 | 2.9 |
| 4 | 0 | 0 |
| 5 | 0.5 | 0 |
| 6 | 0.5 | 0 |
| Q2003 | | |
| 1 | 0 | 0 |
| 2 | 0.5 | 0.5 |
| 3 | 3.0 | 2.3 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| Q2004 | | |
| 1 | 0 | 0 |
| 2 | 0.5 | 0 |
| 3 | 2.9 | 0 |
| 4 | 0 | 0 |
| 5 | 0 | 0.5 |
| 6 | 0 | 0.5 |
| Q2005 | | |
| 1 | 0 | 0 |
| 2 | 0.5 | 0.5 |
| 3 | 2.9 | 2.9 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| Q2006 | | |
| 1 | 0 | 0 |
| 2 | 0.4 | 0.4 |
| 3 | 2.9 | 2.9 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |

<USB>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC8301 | | |
| 1 | 4.8 | 4.8 |
| 2 | 0 | 0 |
| 3 | 3 | 3.1 |
| 4 | 0.4 | 0.8 |
| 5 | 0 | 0 |
| 6 | 0.5 | 0.5 |
| 7 | 0.8 | 1 |
| 8 | 0 | 0 |
| 9 | 3 | 3 |
| 10 | 3 | 3 |
| 11 | 0 | 0 |
| 12 | 3 | 3.1 |
| 13 | 3 | 3 |
| 14 | 3.1 | 3 |
| 15 | 3.1 | 3 |
| 16 | 3.1 | 3.1 |
| 17 | 0 | 0 |
| 18 | 0 | 0 |
| 19 | 2.6 | 2.7 |
| 20 | 2.6 | 2.7 |
| 21 | 2.6 | 2.7 |
| 22 | 2.6 | 2.7 |
| 23 | 2.6 | 2.7 |
| 24 | 2.6 | 2.7 |
| 25 | 0 | 0 |
| 26 | 3.1 | 3 |
| 27 | 2.6 | 2.6 |
| 28 | 2.6 | 2.6 |
| 29 | 0.7 | 0.9 |
| 30 | 0.7 | 0.9 |
| 31 | 0.6 | 0.9 |
| 32 | 0.6 | 0.9 |
| 33 | 0.6 | 0.9 |
| 34 | 0.6 | 0.9 |
| 35 | 0.7 | 0.8 |
| 36 | 0 | 0 |
| 37 | 3 | 3 |
| 38 | 0.6 | 0.9 |
| 39 | 0 | 0 |
| 40 | 3.1 | 3.1 |
| 41 | 3.1 | 3.1 |
| 42 | 0 | 0 |
| 43 | 3.1 | 3.1 |
| 44 | 4.8 | 4.8 |
| 45 | 0 | 0 |
| 46 | 0 | 0 |
| 47 | 0.7 | 0.8 |
| 48 | 0.5 | 0.7 |

<CPU>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC1001 | - | - |
| IC1002 | | |
| 1 | 2.8 | 2.8 |
| 2 | 2.5 | 2.5 |
| 3 | 2.7 | 2.7 |
| 4 | 3 | 3 |
| 5 | 3.1 | 3.1 |
| 6 | 3.1 | 3.1 |
| 7 | 1.4 | 1.4 |
| 8 | 1.5 | 1.5 |
| 9 | 0 | 0 |
| 10 | 0 | 0 |
| 11 | 0 | 0 |
| 12 | 0 | 0 |
| 13 | 0 | 0 |
| 14 | 0 | 0 |
| 15 | 0 | 0 |
| 16 | 0 | 0 |
| 17 | 0 | 0 |
| 18 | 0 | 0 |
| 19 | 3 | 3 |
| 20 | 2.8 | 2.8 |
| IC1003 | | |
| 1 | 0 | 0 |
| 2 | 3 | 3 |
| 3 | 0 | 0 |
| 4 | 3 | 3 |
| 5 | 3 | 3 |
| IC1004 | | |
| 1 | 1.2 | 1.2 |
| 2 | 0 | 0 |
| 3 | 1.4 | 1.4 |
| 4 | 0 | 0 |
| 5 | 3 | 3 |
| IC1005 | | |
| 1 | 3 | 3 |
| 2 | 0 | 0 |
| 3 | 3 | 3 |
| 4 | 0 | 0 |
| 5 | 3 | 3 |
| 6 | 3 | 3 |
| 7 | 3 | 3 |
| 8 | 3 | 3 |
| IC1006 | | |
| 1 | 0 | 0 |
| 2 | 3 | 3 |
| 3 | 3 | 3 |
| 4 | 0 | 0 |
| 5 | 3 | - |
| 6 | 0.5 | 0.5 |
| 7 | 0.4 | 0.8 |
| 8 | 3 | 3.2 |
| IC1007 | | |
| 1 | 3 | 3 |
| 2 | 3 | 3 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| Q1001 | | |
| E | 3.1 | 3.1 |
| C | 3.1 | 3.1 |
| B | 3 | 3 |
| Q1002 | | |
| 1 | 0 | 0 |
| 2 | 3 | 3 |
| 3 | 0 | 3.1 |
| 4 | 0 | 2.9 |
| 5 | 0 | 0 |
| Q1003 | | |
| 1 | 0 | 0 |
| 2 | 3 | 0 |
| 3 | 3.1 | 3.1 |
| 4 | -0.8 | -0.4 |
| 5 | 3.1 | 3.1 |
| Q1004 | | |
| 1 | 0 | 0 |
| 2 | 3 | 3 |
| 3 | 3 | 3 |
| 4 | 3 | 3 |
| 5 | 0 | 0 |
| Q1005 | | |
| E | 0 | 0 |
| C | 1 | 0.4 |
| B | 0 | 0 |
| Q1006 | | |
| 1 | 0 | 0 |
| 2 | 3 | 0 |
| 3 | 3.1 | 3.1 |
| 4 | 3 | -0.2 |
| 5 | 0 | 3.1 |
| Q1007 | | |
| E | 0 | 0 |
| C | 3.1 | 3.1 |
| B | 0.5 | 0.5 |
| Q1008 | | |
| E | 0 | 0 |
| C | 0 | 0 |
| B | 3 | 0 |

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| Q1009 | | |
| D | 3 | 3 |
| S | 0 | 0 |
| G | 3 | 3 |

<AUDIO>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC2101 | | |
| 1 | 0 | 0 |
| 2 | 0.1 | 0 |
| 3 | 0.1 | 0 |
| 4 | 0 | 0 |
| 5 | 3.1 | 3.1 |
| 6 | 3.1 | 3.1 |
| 7 | 0 | 0 |
| 8 | 0 | 0 |
| 9 | 0 | 0 |
| 10 | 0.9 | 1.1 |
| 11 | 0.4 | 0.2 |
| 12 | 0.9 | 1.2 |
| 13 | 0 | 0 |
| 14 | 0 | 0 |
| 15 | 0 | 0 |
| 16 | 0 | 0 |
| IC2201 | | |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | 3 | 3 |
| 5 | 3.1 | 3.1 |
| 6 | 0 | 0 |
| 7 | 1.5 | 1.5 |
| 8 | 1.4 | 1.4 |
| 9 | 1.5 | 1.5 |
| 10 | 2.9 | 2.9 |
| 11 | 2.9 | 2.9 |
| 12 | 3 | 3 |
| 13 | 1.5 | 1.5 |
| 14 | 1.5 | 1.5 |
| 15 | 3 | 3 |
| 16 | 0 | 0 |
| 17 | 1.5 | 1.5 |
| 18 | 2.4 | 2.4 |
| 19 | 1.5 | 1.5 |
| 20 | 2.4 | 2.4 |
| 21 | 1.5 | 1.5 |
| 22 | 0.2 | 2.4 |
| 23 | 1.5 | 1.5 |
| 24 | 0.2 | 2.4 |
| 25 | 0.9 | 0.9 |
| 26 | 0 | 0 |
| 27 | 0 | 0 |
| 28 | 4.8 | 4.8 |
| 29 | 0 | 0 |
| 30 | 2.4 | 2.4 |
| 31 | 0 | 0 |
| 32 | 3 | 3 |
| 33 | 1.5 | 1.5 |
| 34 | 0.8 | 1.1 |
| 35 | 0.8 | 1.1 |
| 36 | 1.5 | 1.5 |
| 37 | 1.5 | 1.5 |
| 38 | 1.5 | 1.5 |
| 39 | 1.5 | 0.2 |
| 40 | 1.5 | 0 |
| 41 | 0 | 0 |
| 42 | 4 | 4.7 |
| 43 | 2.6 | 0 |
| 44 | 4 | 4.4 |
| 45 | 1.5 | 0.2 |
| 46 | 1.5 | 0.2 |
| 47 | 1.5 | 1.5 |
| 48 | 1.5 | 1.5 |
| Q2202 | | |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| Q2401 | | |
| E | 4 | 4.7 |
| C | 4.8 | 4.8 |
| B | 4.8 | 4.8 |
| Q2403 | | |
| E | 3 | 3 |
| C | 4.8 | 4.8 |
| B | 3.7 | 3.7 |

<DV MAIN>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC3001 | - | - |
| IC3002 | | |
| 1 | 0 | 0 |
| 2 | 0.5 | 0.5 |
| 3 | 0.4 | 0.4 |
| 4 | 1.7 | 1.7 |
| 5 | 0.7 | 0.7 |
| 6 | 2.4 | 2.4 |
| 7 | 1.2 | 1.2 |
| 8 | 3.1 | 3.1 |
| 9 | 3.1 | 3.1 |
| 10 | 3.1 | 3.1 |
| 11 | 3.1 | 3.1 |
| 12 | 2.1 | 2.1 |
| 13 | 1.1 | 1.1 |
| 14 | 0 | 0 |
| 15 | 0 | 0 |
| 16 | 3 | 3 |
| 17 | 3 | 3 |
| 18 | 1.4 | 1.4 |
| 19 | 1.3 | 1.3 |
| 20 | 0 | 0 |
| IC3005 | | |
| 1 | 0 | 0.4 |
| 2 | 0 | 0.4 |
| 3 | 0 | 0 |
| 4 | 0.8 | 1.7 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 7 | 0 | 0 |
| 8 | 0 | 3.1 |
| Q3001 | | |
| E | 1.8 | 1.8 |
| C | 2.9 | 2.9 |
| B | 2.4 | 2.4 |
| Q3002 | | |
| E | 0.3 | 1.2 |
| C | 3.1 | 3.1 |
| B | 0.8 | 1.7 |

<VIDEO I/O>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC3701 | | |
| 1 | 0 | 0 |
| 2 | 2.3 | 2.3 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 7 | 1.9 | 1.9 |
| 8 | 0 | 0 |
| 9 | 2.3 | 2.3 |
| 10 | 0 | 0 |
| 11 | 2.1 | 2.1 |
| 12 | 2.1 | 2.1 |
| 13 | 4.8 | 4.8 |
| 14 | 1.9 | 1.9 |
| 15 | 1.9 | 1.9 |
| 16 | 4.8 | 4.8 |
| IC3731 | | |
| 1 | 3 | 3 |
| 2 | 2 | 2 |
| 3 | 4.8 | 4.8 |
| 4 | 1.7 | 1.7 |
| 5 | 0 | 0 |
| 6 | 2.3 | 2.3 |
| IC3801 | - | - |
| IC3851 | - | - |
| Q3701 | | |
| 1 | 1.2 | 1.2 |
| 2 | 0.6 | 0.6 |
| 3 | 0 | 0 |
| 4 | 1.4 | 1.4 |
| 5 | 0.8 | 0.8 |
| 6 | 0 | 0 |
| Q3702 | | |
| 1 | 0.2 | 0 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | 4.8 | 4.8 |
| 5 | 4.9 | 4.7 |
| 6 | 4.9 | 4.7 |
| Q3704 | | |
| E | 0.9 | 0.9 |
| C | 0 | 0 |
| B | 0.3 | 0.3 |
| Q3705 | | |
| 1 | 0.9 | 0.9 |
| 2 | 0.3 | 0.3 |
| 3 | 0 | 0 |
| 4 | 0.9 | 0.9 |
| 5 | 0.3 | 0.3 |
| 6 | 0 | 0 |
| Q3731 | | |
| E | 0 | 0 |
| C | 4.8 | 4.8 |
| B | 0 | 0 |
| Q3732 | | |
| E | 0 | 0 |
| C | 0 | 0 |
| B | 3 | 3 |
| Q3733 | | |
| 1 | 0 | 0 |
| 2 | 0.4 | 0.4 |
| 3 | 0 | 0 |
| 4 | 4.8 | 4.8 |
| 5 | 4.8 | 4.8 |
| 6 | 4.8 | 4.8 |
| Q3734 | | |
| E | 0 | 0 |
| C | 4.8 | 4.8 |
| B | 0 | 0 |
| Q3735 | | |
| 1 | 0.1 | 0.1 |
| 2 | 0.4 | 0.4 |
| 3 | 0 | 0 |
| 4 | 2.1 | 2.1 |
| 5 | 1.5 | 1.5 |
| 6 | 4.8 | 4.8 |

<CDS/DSP>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC4201 | | |
| 1 | 1.2 | 0 |
| 2 | 1.2 | 0 |
| 3 | 0.5 | 0 |
| 4 | 0.2 | 0 |
| 5 | 0 | 3 |
| 6 | 0 | 0 |
| 7 | 0 | 0 |
| 8 | 0 | 0 |
| 9 | 1.2 | 0 |
| 10 | 3 | 3 |
| 11 | 0 | 0 |
| 12 | 1.5 | 1.5 |
| 13 | 3 | 3 |
| 14 | 2.5 | 0 |
| 15 | 3 | 0 |
| 16 | 2.4 | 0 |
| 17 | 2.5 | 0 |
| 18 | 0 | 0 |
| 19 | 3 | 3 |
| 20 | 1.9 | 0 |
| 21 | 1.9 | 0 |
| 22 | 2 | 0 |
| 23 | 1.9 | 0 |
| 24 | 1.2 | 0 |
| 25 | 3 | 3 |
| 26 | 0 | 0 |
| 27 | 0 | 0 |
| 28 | 1.4 | 0 |
| 29 | 2 | 0 |
| 30 | 0.9 | 0 |
| 31 | 3 | 3 |
| 32 | 0 | 0 |
| 33 | 3 | 3 |
| 34 | 3 | 3 |
| 35 | 3 | 3 |
| 36 | 1.2 | 0 |
| IC4202 | | |
| 1 | 4.8 | 4.8 |
| 2 | 0 | 0 |
| 3 | 1.2 | 1.2 |
| 4 | 3 | 3 |
| 5 | 4.8 | 4.8 |
| IC4301 | - | - |
| IC4302 | | |
| 1 | 1.6 | 1.8 |
| 2 | 0 | 0 |
| 3 | 1.8 | 1.8 |
| 4 | 1.8 | 1.8 |
| 5 | 1.4 | 1.4 |

<OP DRIVE>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC4802 | | |
| 1 | 3.1 | 3.1 |
| 2 | 2.6 | 2.6 |
| 3 | 2.6 | 2.6 |
| 4 | 0 | 0 |
| 5 | 2.6 | 2.6 |
| 6 | 2.6 | 2.6 |
| 7 | 2.6 | 2.6 |
| 8 | 4.8 | 4.8 |
| IC4803 | | |
| 1 | 1.3 | 1.3 |
| 2 | 0.6 | 0.6 |
| 3 | 0.6 | 0.6 |
| 4 | 0 | 0 |
| 5 | 2.6 | 2.6 |
| 6 | 2.6 | 2.6 |
| 7 | 1.6 | 2.8 |
| 8 | 4.8 | 4.8 |
| IC4804 | | |
| 1 | 1.3 | 0.3 |
| 2 | 1.6 | 2.6 |
| 3 | 1.6 | 0 |
| 4 | 0 | 0 |
| 5 | 1.5 | 3 |
| 6 | 1.5 | 3 |
| 7 | 2 | 0 |
| 8 | 4.8 | 4.8 |
| IC4807 | | |
| 1 | 1.5 | 3 |
| 2 | 1.5 | 3 |
| 3 | 4.8 | 4.8 |
| 4 | 0 | 0 |
| 5 | 1.5 | 3 |
| 6 | 1.5 | 3 |
| 7 | 4.8 | 4.8 |
| 8 | 4.8 | 4.8 |
| IC4851 | | |
| 1 | 0 | 0 |
| 2 | 0.6 | 0.6 |
| 3 | 0.3 | 0.3 |
| 4 | 0 | 0 |
| 5 | 0 | 0.3 |
| 6 | 0.3 | 0 |
| 7 | 0 | 0 |
| 8 | 3.1 | 3.1 |
| 9 | 4.6 | 4.6 |
| 10 | 0.6 | 0.6 |
| 11 | 0 | 0 |
| 12 | 0.7 | 0.5 |
| 13 | 4.6 | 4.6 |
| 14 | 0.7 | 0.7 |
| 15 | 0 | 0 |
| 16 | 0.7 | 0.7 |
| 17 | 0 | 0 |
| 18 | 0 | 0 |
| 19 | 0 | 0 |
| 20 | 0 | 0 |
| 21 | 0 | 0 |
| 22 | 0 | 0 |
| 23 | 4.6 | 4.6 |
| 24 | 0.8 | 1.5 |
| 25 | 0 | 0 |
| 26 | 0.8 | 1.5 |
| 27 | 4.8 | 4.6 |
| 28 | 0.8 | 1.5 |
| 29 | 0 | 0 |
| 30 | 0.8 | 1.5 |
| 31 | 3.1 | 3.1 |
| 32 | 0 | 0 |
| 33 | 0 | 0 |
| 34 | 3 | 3 |
| 35 | 3 | 3 |
| 36 | 1.5 | 1.5 |
| 37 | 1.5 | 1.5 |
| 38 | 3 | 3 |
| Q4801 | | |
| E | 0.6 | 0.6 |
| C | 2.1 | 2.1 |
| B | 1.3 | 1.3 |
| Q4802 | | |
| E | 0 | 0 |
| C | 1.5 | 3 |
| B | 0 | 0 |
| Q4803 | | |
| E | 0 | 0 |
| C | 4.8 | 4.8 |
| B | 0 | 0 |
| Q4804 | | |
| E | 4.8 | 4.8 |
| C | 1.5 | 3 |
| B | 4.8 | 4.8 |
| Q4805 | | |
| E | 4.8 | 4.8 |
| C | 1.5 | 3 |
| B | 4.8 | 4.8 |

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| Q4806 | | |
| E | 1.2 | 0 |
| C | 4.8 | 4.8 |
| B | 2 | 0 |
| Q4851 | | |
| E | 0 | 0 |
| C | 3.5 | 3.7 |
| B | 0 | 0 |

<TG>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC5501 | | |
| 1 | 0 | 0 |
| 2 | 3 | 3 |
| 3 | 3 | 3 |
| 4 | 3 | 3.1 |
| 5 | 0 | 0 |
| 6 | 3 | 3.1 |
| 7 | 0.3 | 0 |
| 8 | 0.3 | 0 |
| 9 | 0 | 0 |
| 10 | 3 | 3.1 |
| 11 | 1.6 | 0 |
| 12 | 3 | 3.1 |
| 13 | 0 | 0 |
| 14 | 1.3 | 0 |
| 15 | 0 | 0 |
| 16 | 3.1 | 3.1 |
| 17 | 2.3 | 0 |
| 18 | 2.3 | 0 |
| 19 | 2.4 | 0 |
| 20 | 0 | 0 |
| 21 | 0 | 0 |
| 22 | 1.2 | 1.4 |
| 23 | 0 | 0 |
| 24 | 3 | 3.1 |
| 25 | 0 | 0.6 |
| 26 | 3.1 | 0 |
| 27 | 2.5 | 0 |
| 28 | 0 | 0 |
| 29 | 0 | 0 |
| 30 | 0.3 | 0 |
| 31 | 0 | 3 |
| 32 | 3 | 0 |
| 33 | 3 | 3.1 |
| 34 | 1.5 | 0 |
| 35 | 1.3 | 1.4 |
| 36 | 3 | 3.1 |
| 37 | 0 | 0 |
| 38 | 0 | 0 |
| 39 | 0 | 0 |
| 40 | -0.3 | 0 |
| 41 | -7.1 | 0 |
| 42 | -0.3 | 15.1 |
| 43 | 15.1 | 15.1 |
| 44 | -7.1 | 15.1 |
| 45 | -7.1 | 15.1 |
| 46 | -7.6 | -7.6 |
| 47 | 0 | 0 |
| 48 | 3 | 3 |

<REG>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC6001 | | |
| 1 | 3.1 | 3.1 |
| 2 | 3 | 3 |
| 3 | 3 | 3 |
| 4 | 3 | 3 |
| 5 | 3 | 3 |
| 6 | 0 | 0 |
| 7 | 1.2 | 1.2 |
| 8 | 11.1 | 11.1 |
| 9 | 1 | 1 |
| 10 | 1.2 | 1.2 |
| 11 | 2.2 | 2.2 |
| 12 | 0 | 0 |
| 13 | 0 | 0 |
| 14 | 0 | 0 |
| 15 | 0 | 0 |
| 16 | 0 | 0 |
| 17 | 0.1 | 0.1 |
| 18 | 0 | 0 |
| 19 | 2.2 | 2.2 |
| 20 | 1 | 1 |
| 21 | 0 | 0 |
| 22 | 2.2 | 2.2 |
| 23 | 1 | 1 |
| 24 | 0.6 | 0.6 |
| 25 | 1 | 1 |
| 26 | 0.6 | 0.6 |
| 27 | 1 | 1 |
| 28 | 0.8 | 0.8 |
| 29 | 1 | 1 |
| 30 | 0.6 | 0.6 |
| 31 | 0.3 | 0.3 |
| 32 | 0.3 | 0.3 |
| 33 | 0.6 | 0.6 |
| 34 | 0 | 0 |
| 35 | 0 | 0 |
| 36 | 0.5 | 0.5 |
| 37 | 0.8 | 0.8 |
| 38 | 0 | 0 |
| 39 | 1 | 1 |
| 40 | 0 | 0 |
| 41 | 2.5 | 2.5 |
| 42 | 1.1 | 1.1 |
| 43 | 0 | 0 |
| 44 | 2.2 | 2.2 |
| 45 | 2.2 | 0 |
| 46 | 2.2 | 2.2 |
| 47 | 6.5 | 6.5 |
| 48 | 1 | 1 |
| 49 | 1 | 1 |
| 50 | 2.6 | 2.1 |
| 51 | 11.1 | 11.1 |
| 52 | 0 | 0 |
| 53 | 9.7 | 9.7 |
| 54 | 8.8 | 8.8 |
| 55 | 8 | 8 |
| 56 | 6 | 6 |
| 57 | 9.1 | 9.1 |
| 58 | 7.8 | 7.8 |
| 59 | 0 | 0 |
| 60 | 11.1 | 11.1 |
| 61 | 0 | 0 |
| 62 | 0 | 0 |
| 63 | 0.2 | 0.2 |
| 64 | 2 | 2 |
| IC6801 | | |
| 1 | 11.1 | 11.1 |
| 2 | 0 | 0 |
| 3 | 1.2 | 1.2 |
| 4 | 10.4 | 10.4 |
| 5 | 11.1 | 11.1 |
| Q6101 | | |
| 1 | 7.8 | 7.8 |
| 2 | 11.1 | 11.1 |
| 3 | 0 | 0 |
| 4 | 3.1 | 3.1 |
| 5 | 3.1 | 3.1 |
| Q6102 | | |
| E | 3.1 | 3.1 |
| C | 2.5 | 2.5 |
| B | 2.6 | 2.4 |
| Q6201 | | |
| 1 | 9 | 8.6 |
| 2 | 11.1 | 11.1 |
| 3 | 0 | 0 |
| 4 | 1.8 | 2.6 |
| 5 | 1.8 | 2.6 |
| Q6301 | | |
| 1 | 6 | 6 |
| 2 | 11.1 | 11.1 |
| 3 | 0 | 0 |
| 4 | 4.8 | 4.8 |
| 5 | 4.8 | 4.8 |
| Q6302 | | |
| E | 4.8 | 4.8 |
| C | -0.6 | -0.6 |
| B | 4.8 | 4.8 |

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| Q6303 | | |
| E | 0 | 0 |
| C | 4.8 | 4.8 |
| B | 0 | 0 |
| Q6401 | | |
| 1 | 8.5 | 8.5 |
| 2 | 11.1 | 11.1 |
| 3 | 0 | 0 |
| 4 | 2.6 | 2.6 |
| 5 | 2.6 | 2.6 |
| Q6501 | | |
| 1 | 9.7 | 9.7 |
| 2 | 11.1 | 11.1 |
| 3 | 0 | 0 |
| 4 | 1.2 | 1.2 |
| 5 | 1.2 | 1.2 |
| Q6601 | | |
| D | 11.1 | 11.1 |
| S | 8 | 8 |
| G | 0 | 0 |
| Q6602 | | |
| 1 | 4.3 | 4.3 |
| 2 | 5.1 | 5.1 |
| 3 | 14.5 | 14.5 |
| 4 | 4.3 | 4.3 |
| 5 | 4.8 | 4.8 |
| 6 | 15.1 | 15.1 |
| Q6603 | | |
| E | 15.1 | 15.1 |
| C | 12 | 12 |
| B | 14.5 | 14.5 |
| Q6604 | | |
| E | 0 | 0 |
| C | 15.1 | 15.1 |
| B | -1 | -1 |
| Q6605 | | |
| 1 | 0 | 0 |
| 2 | -7.6 | -7.6 |
| 3 | -14.5 | -14.5 |
| 4 | -7 | - |
| 5 | -7.5 | -7.5 |
| 6 | -15 | -15 |
| Q6606 | | |
| E | -15 | -15 |
| C | -7.6 | -7.6 |
| B | -14.5 | -15 |
| Q6701 | | |
| D | 11.1 | 11.1 |
| S | 11.1 | 11.1 |
| G | 0 | 0 |
| Q6801 | | |
| 1 | 3.2 | 3.2 |
| 2 | 3.2 | 3.2 |
| 3 | 0 | 0 |
| 4 | 10.9 | 10.9 |
| 5 | 11.1 | 11.1 |

<DSC>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC8001 | - | - |
| IC8002 | | |
| 1 | 3.1 | 3.1 |
| 2 | 0 | 0 |
| 3 | 3.1 | 3.1 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 7 | 0 | 0 |
| 8 | 0 | 0 |
| 9 | 3.1 | 3.1 |
| 10 | 0 | 0 |
| 11 | 0 | 0 |
| 12 | 0 | 0 |
| 13 | 0 | 0 |
| 14 | 0 | 0 |
| 15 | 3.1 | 3.1 |
| 16 | 0 | 0 |
| 17 | 3.1 | 3.1 |
| 18 | 3.1 | 3.1 |
| 19 | 3.1 | 3.1 |
| 20 | 3.1 | 3.1 |
| 21 | 0 | 0 |
| 22 | 0 | 0 |
| 23 | 0 | 0 |
| 24 | 0 | 0 |
| 25 | 0 | 0 |
| 26 | 0 | 0 |
| 27 | 0 | 0 |
| 28 | 0 | 0 |
| 29 | 3.1 | 3.1 |
| 30 | 0 | 0 |
| 31 | 0 | 0 |
| 32 | 0 | 0 |
| 33 | 0 | 0 |
| 34 | 0 | 0 |
| 35 | 3.1 | 3.1 |
| 36 | 0 | 0 |
| 37 | 0 | 0 |
| 38 | 0 | 0 |
| 39 | 0 | 0 |
| 40 | 0 | 0 |
| 41 | 3.1 | 3.1 |
| 42 | 0 | 0 |
| 43 | 3.1 | 3.1 |
| 44 | 0 | 0 |
| 45 | 0 | 0 |
| 46 | 0 | 0 |
| 47 | 0 | 0 |
| 48 | 0 | 0 |
| 49 | 3.1 | 3.1 |
| 50 | 0 | 0 |
| 51 | 0 | 0 |
| 52 | 0 | 0 |
| 53 | 0 | 0 |
| 54 | 0 | 0 |
| 55 | 3.1 | 3.1 |
| 56 | 0 | 0 |
| 57 | 0 | 0 |
| 58 | 0 | 0 |
| 59 | 0 | 0 |
| 60 | 0 | 0 |
| 61 | 0 | 0 |
| 62 | 0 | 0 |
| 63 | 0 | 0 |
| 64 | 0 | 0 |
| 65 | 0 | 0 |
| 66 | 0 | 0 |
| 67 | 0 | 0 |
| 68 | 0 | 0 |
| 69 | 0 | 0 |
| 70 | 0 | 0 |
| 71 | 0 | 0 |
| 72 | 0 | 0 |
| 73 | 0 | 0 |
| 74 | 0 | 0 |
| 75 | 3.1 | 3.1 |
| 76 | 0 | 0 |
| 77 | 0 | 0 |
| 78 | 0 | 0 |
| 79 | 0 | 0 |
| 80 | 0 | 0 |
| 81 | 3.1 | 3.1 |
| 82 | 0 | 0 |
| 83 | 0 | 0 |
| 84 | 0 | 0 |
| 85 | 0 | 0 |
| 86 | 0 | 0 |
| IC8003 | | |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 7 | 0 | 0 |
| 8 | 0 | 0 |

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| 9 | 0 | 0 |
| 10 | 0 | 0 |
| 11 | 3.1 | 3.1 |
| 12 | 3 | 3 |
| 13 | 0 | 0 |
| 14 | 0 | 0 |
| 15 | 1.3 | 1.3 |
| 16 | 0 | 0 |
| 17 | 0 | 0 |
| 18 | 0 | 0 |
| 19 | 0 | 0 |
| 20 | 0 | 0 |
| 21 | 0 | 0 |
| 22 | 0 | 0 |
| 23 | 0 | 0 |
| 24 | 3.1 | 3.1 |
| 25 | 0 | 0 |
| 26 | 3.1 | 3.1 |
| 27 | 0 | 0 |
| 28 | 3.1 | 3.1 |
| 29 | 0.5 | 1.1 |
| 30 | 2.5 | 2.7 |
| 31 | 0.5 | 1.1 |
| 32 | 2.5 | 2.7 |
| 33 | 0.5 | 1.1 |
| 34 | 2.5 | 2.7 |
| 35 | 0.5 | 1.1 |
| 36 | 2.5 | 2.7 |
| 37 | 3.3 | 3.1 |
| 38 | 0.5 | 1.1 |
| 39 | 2.5 | 2.7 |
| 40 | 0.5 | 1.1 |
| 41 | 2.5 | 2.7 |
| 42 | 0.5 | 1.1 |
| 43 | 2.5 | 2.7 |
| 44 | 0.5 | 1.1 |
| 45 | 2.5 | 2.7 |
| 46 | 0 | 0 |
| 47 | 3.5 | 3.1 |
| 48 | 0 | 0 |
| IC8004 | | |
| 1 | 0.7 | 0.7 |
| 2 | 0.5 | 0.5 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| IC8006 | | |
| 1 | 0.8 | 0.8 |
| 2 | 0 | 0 |
| 3 | 0.4 | 0.4 |
| 4 | 0 | 0 |
| 5 | 0.8 | 0.8 |
| 6 | 0 | 0 |
| 7 | 0.2 | 0.2 |
| 8 | 0.3 | 0.3 |
| 9 | 0.2 | 0.2 |
| 10 | 0.2 | 0.2 |
| 11 | 0 | 0 |
| 12 | 0.8 | 0.8 |
| 13 | 0.2 | 0.2 |
| 14 | 0.4 | 0.4 |
| 15 | 0.2 | 0.2 |
| 16 | 0.3 | 0.3 |
| IC8007 | - | - |
| Q8001 | - | - |
| Q8002 | | |
| E | 3.1 | 3.1 |
| C | 0.8 | 0.8 |
| B | 3.1 | 3.1 |

<MDA>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC1601 | | |
| 1 | 0.4 | 0.4 |
| 2 | 0.5 | 0.5 |
| 3 | 0 | 0 |
| 4 | 0.5 | 0.5 |
| 5 | 1.5 | 1.5 |
| 6 | 1.5 | 1.5 |
| 7 | 1.5 | 1.5 |
| 8 | 1.5 | 1.5 |
| 9 | 1.6 | 1.6 |
| 10 | 1.5 | 1.5 |
| 11 | 2.8 | 2.8 |
| 12 | 1.2 | 1.2 |
| 13 | 1.6 | 1.6 |
| 14 | 1.5 | 1.5 |
| 15 | 1.5 | 1.5 |
| 16 | 1.5 | 1.5 |
| 17 | 1.6 | 1.6 |
| 18 | 3.1 | 3.1 |
| 19 | 0.7 | 0.7 |
| 20 | 0.4 | 0.4 |
| 21 | 1.3 | 1.3 |
| 22 | 1.3 | 1.3 |
| 23 | 11.1 | 11.1 |
| 24 | 2.6 | 2.6 |
| 25 | 0.7 | 0.7 |
| 26 | 1.3 | 1.3 |
| 27 | 0.7 | 0.7 |
| 28 | 1 | 1 |
| 29 | 1.2 | 1.2 |
| 30 | 1.2 | 1.2 |
| 31 | 1.2 | 1.2 |
| 32 | 0 | 0 |
| 33 | 1.2 | 1.2 |
| 34 | 1.5 | 1.5 |
| 35 | 0 | 0 |
| 36 | 0 | 0 |
| 37 | 0 | 0 |
| 38 | 0 | 0 |
| 39 | 4.6 | 4.6 |
| 40 | - | - |
| 41 | - | - |
| 42 | 1.5 | 1.5 |
| 43 | 1.5 | 1.5 |
| 44 | 14 | 14 |
| 45 | 2.3 | 2.3 |
| 46 | 12.5 | 12.5 |
| 47 | 0 | 0 |
| 48 | 0 | 0 |
| 49 | 3 | 3 |
| 50 | 3 | 3 |
| 51 | 0 | 0 |
| 52 | 1.2 | 1.2 |
| 53 | 0.2 | 0.2 |
| 54 | 1.5 | 1.5 |
| 55 | 0.7 | 0.7 |
| 56 | 0.9 | 0.9 |
| IC1701 | | |
| 1 | - | - |
| 2 | 1.5 | 1.5 |
| 3 | 1.5 | 1.5 |
| 4 | 0 | 0 |
| 5 | 1.4 | 1.4 |
| 6 | 1.5 | 1.5 |
| 7 | - | - |
| 8 | 4.6 | 4.6 |
| IC1702 | | |
| 1 | - | - |
| 2 | 1.5 | 1.5 |
| 3 | - | - |
| 4 | 0 | 0 |
| 5 | - | - |
| 6 | 1.5 | 1.5 |
| 7 | - | - |
| 8 | 4.6 | 4.6 |
| Q1601 | | |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 4.6 | 4.6 |
| 4 | 0 | 0 |
| 5 | 4.6 | 4.6 |

<PRE/REC>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC3501 | | |
| 1 | 0 | 0 |
| 2 | 0.5 | 0.5 |
| 3 | 0 | 0 |
| 4 | 0 | 1.5 |
| 5 | 2.5 | 2.5 |
| 6 | 2.4 | 1.6 |
| 7 | 1.4 | 0 |
| 8 | 0 | 0 |
| 9 | 1.3 | 3.1 |
| 10 | 1.3 | 1.5 |
| 11 | 3.1 | 3.1 |
| 12 | 0 | 0 |
| 13 | 4.8 | 4.8 |
| 14 | 0 | 0 |
| 15 | 0 | 0 |
| 16 | 0 | 0 |
| 17 | 0 | 0 |
| 18 | 3.8 | 1.7 |
| 19 | 3.6 | 1.7 |
| 20 | 3.6 | 1.7 |
| 21 | 3.8 | 1.7 |
| 22 | 0 | 0 |
| 23 | 3.8 | 1.6 |
| 24 | 3.6 | 1.7 |
| 25 | 3.6 | 1.6 |
| 26 | 3.8 | 1.6 |
| 27 | 0 | 0 |
| 28 | 2.3 | 2.3 |
| 29 | 3.6 | 1.7 |
| 30 | 3.6 | 1.7 |
| 31 | 2.2 | 2.2 |
| 32 | 0 | 0 |
| 33 | 0 | 0 |
| 34 | 0 | 0 |
| 35 | 1.8 | 1.8 |
| 36 | 0.4 | 0.4 |
| 37 | 3.1 | 3.1 |
| 38 | 0 | 3 |
| 39 | 3.1 | 3.1 |
| 40 | 1.5 | 1.5 |
| 41 | 0 | 3 |
| 42 | 3 | 3 |
| 43 | 4.8 | 4.8 |
| 44 | 3.1 | 0 |
| 45 | 0 | 0 |
| 46 | 0 | 2 |
| 47 | 0 | 2 |
| 48 | 4.7 | 3.1 |
| 49 | 4.4 | 2.9 |
| 50 | 0.5 | 1.6 |
| 51 | 1.2 | 1.3 |
| 52 | 0.9 | 1.6 |
| 53 | 0 | 0 |
| 54 | 3.1 | 2.6 |
| 55 | 2.5 | 1.9 |
| 56 | 1.1 | 1.1 |
| 57 | 2.5 | 1.9 |
| 58 | 2.5 | 1.3 |
| 59 | 0 | 0 |
| 60 | 1.3 | 1.3 |
| 61 | 3.3 | 1.9 |
| 62 | 2.6 | 1.9 |
| 63 | 2.5 | 1.4 |
| 64 | 2.5 | 1.9 |
| IC3502 | | |
| 1 | 1.4 | 0 |
| 2 | 1.4 | 0 |
| 3 | 0 | 0 |
| 4 | 0.7 | 3.1 |
| 5 | 3.1 | 3.1 |

<JACK>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC501 | | |
| 1 | 2 | 2 |
| 2 | 2 | 2 |
| 3 | 2 | 2 |
| 4 | 0 | 0 |
| 5 | 2 | 2 |
| 6 | 2 | 2 |
| 7 | 1.5 | 1.5 |
| 8 | 4.8 | 4.8 |
| IC502 | | |
| 1 | 4.5 | 4.5 |
| 2 | 0 | 0 |
| 3 | 4.7 | 4.7 |
| Q501 | | |
| E | 0 | 0 |
| C | 4.3 | 4.3 |
| B | - | - |

<MONI BW>

| MODE PIN NO. | EE |
|---|---|
| IC7601 | |
| 1 | 2.7 |
| 2 | 7.2 |
| 3 | 2.4 |
| 4 | 2.5 |
| 5 | 2.4 |
| 6 | 2.5 |
| 7 | 2.4 |
| 8 | 2.5 |
| 9 | 2.4 |
| 10 | 0 |
| 11 | 0 |
| 12 | 5.4 |
| 13 | 0.2 |
| 14 | 0.2 |
| 15 | 0.2 |
| 16 | 12 |
| 17 | 0 |
| 18 | 0 |
| 19 | 2.5 |
| 20 | 0.1 |
| 21 | 6.1 |
| 22 | 1.7 |
| 23 | 0 |
| 24 | 0 |
| 25 | 0 |
| 26 | 1.5 |
| 27 | 0 |
| 28 | 1.5 |
| 29 | 0 |
| 30 | 1.4 |
| 31 | 3.1 |
| 32 | 3.1 |
| 33 | 0.9 |
| 34 | 0 |
| 35 | 1.5 |
| 36 | 3.1 |
| 37 | 0 |
| 38 | 0 |
| 39 | 2.7 |
| 40 | 0 |
| 41 | 0 |
| 42 | 0 |
| 43 | 0 |
| 44 | 0.4 |
| 45 | 0 |
| 46 | 1.3 |
| 47 | 0 |
| 48 | 1.5 |
| 49 | 3.1 |
| 50 | 0 |
| 51 | 0 |
| 52 | 1.5 |
| 53 | 3.1 |
| 54 | 2.9 |
| 55 | 0 |
| 56 | 0 |
| 57 | 3 |
| 58 | 3 |
| 59 | 3.1 |
| 60 | 0 |
| 61 | 3.1 |
| 62 | 2.7 |
| 63 | 2.7 |
| 64 | 0 |
| IC7602 | |
| 1 | 9 |
| 2 | 4.8 |
| 3 | 4.8 |
| 4 | 0 |
| 5 | 4.8 |
| 6 | 4.8 |
| 7 | 7.2 |
| 8 | 12 |
| Q7601 | |
| E | -10.4 |
| C | 0 |
| B | -10 |
| Q7602 | |
| E | -9.4 |
| C | -15 |
| B | -10 |
| Q7603 | |
| E | -9.8 |
| C | -0.2 |
| B | -9.4 |
| Q7604 | |
| E | -9.8 |
| C | -14.1 |
| B | -10.5 |
| Q7608 | - |
| Q7609 | - |
| Q7610 | - |
| Q7611 | |
| E | 0 |
| C | 4.8 |
| B | 0 |

| MODE PIN NO. | EE |
|---|---|
| Q7612 | |
| E | 4.8 |
| C | 1.1 |
| B | 4.8 |

<BL 2.5>

| MODE PIN NO. | EE |
|---|---|
| Q7501 | |
| E | 0 |
| C | 4.3 |
| B | 0.4 |
| Q7502 | |
| E | 0 |
| C | 4.3 |
| B | 0.4 |
| Q7503 | |
| E | 4.4 |
| C | 4.3 |
| B | 0 |
| Q7504 | |
| E | 0 |
| C | 0 |
| B | 3.0 |

<CCD>

| MODE PIN NO. | EE |
|---|---|
| IC5001 | |
| 1 | -7.2 |
| 2 | -7.2 |
| 3 | -0.3 |
| 4 | -0.3 |
| 5 | 0 |
| 6 | 0 |
| 7 | 12 |
| 8 | 15.1 |
| 9 | 13.9 |
| 10 | 8 |
| 11 | -7.6 |
| 12 | 1.6 |
| 13 | 1.3 |
| 14 | 8 |
| Q5001 | |
| E | 11.2 |
| C | 15.1 |
| B | 12 |
| Q5002 | |
| E | 0 |
| C | 8 |
| B | 0 |

# PARTS LIST

## SAFETY PRECAUTION

**Parts identified by the ⚠ symbol are critical for safety. Replace only with specified part numbers.**

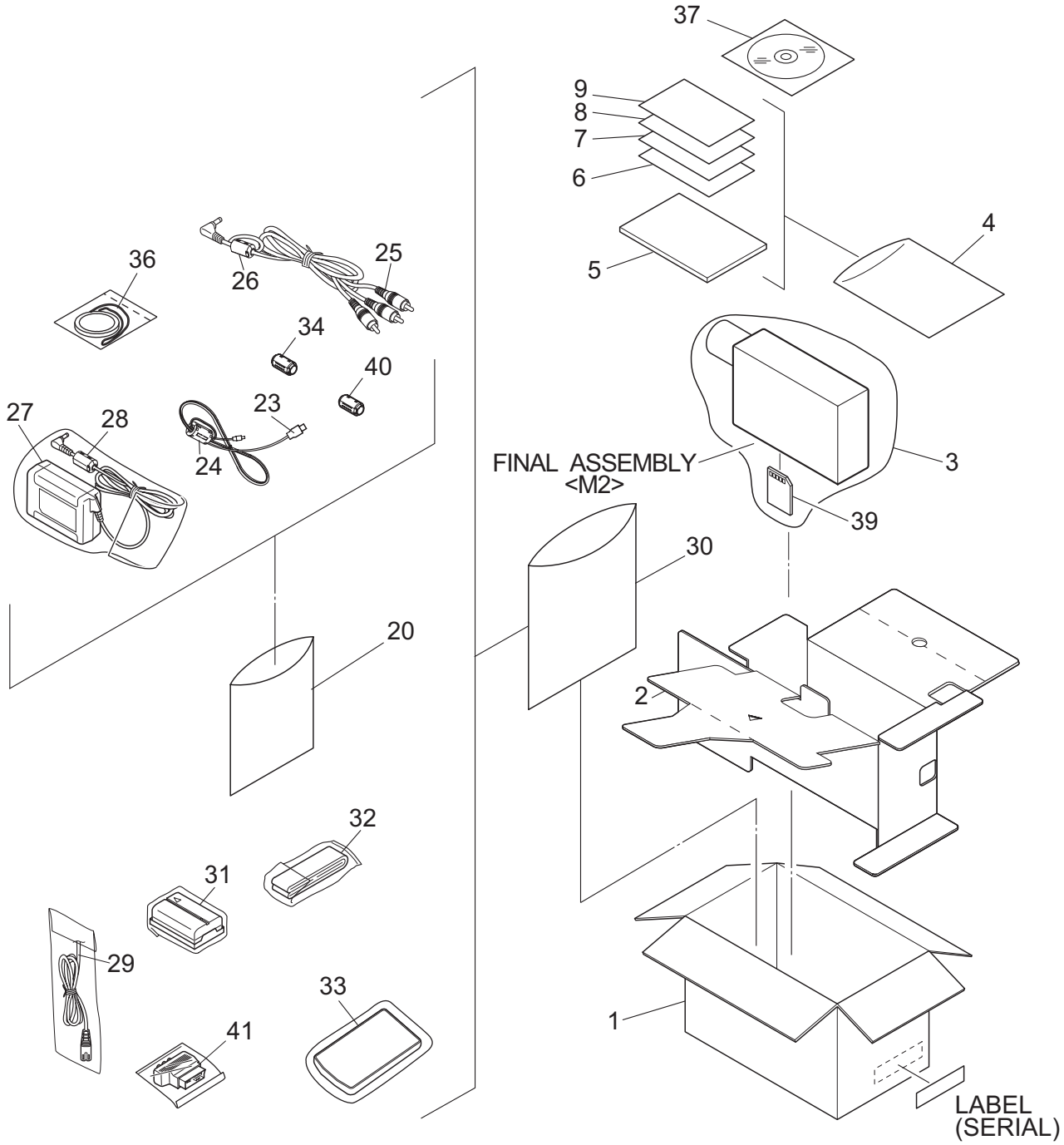
## BEWARE OF BOGUS PARTS

**Parts that do not meet specifications may cause trouble in regard to safety and performance. We recommend that genuine JVC parts be used.**

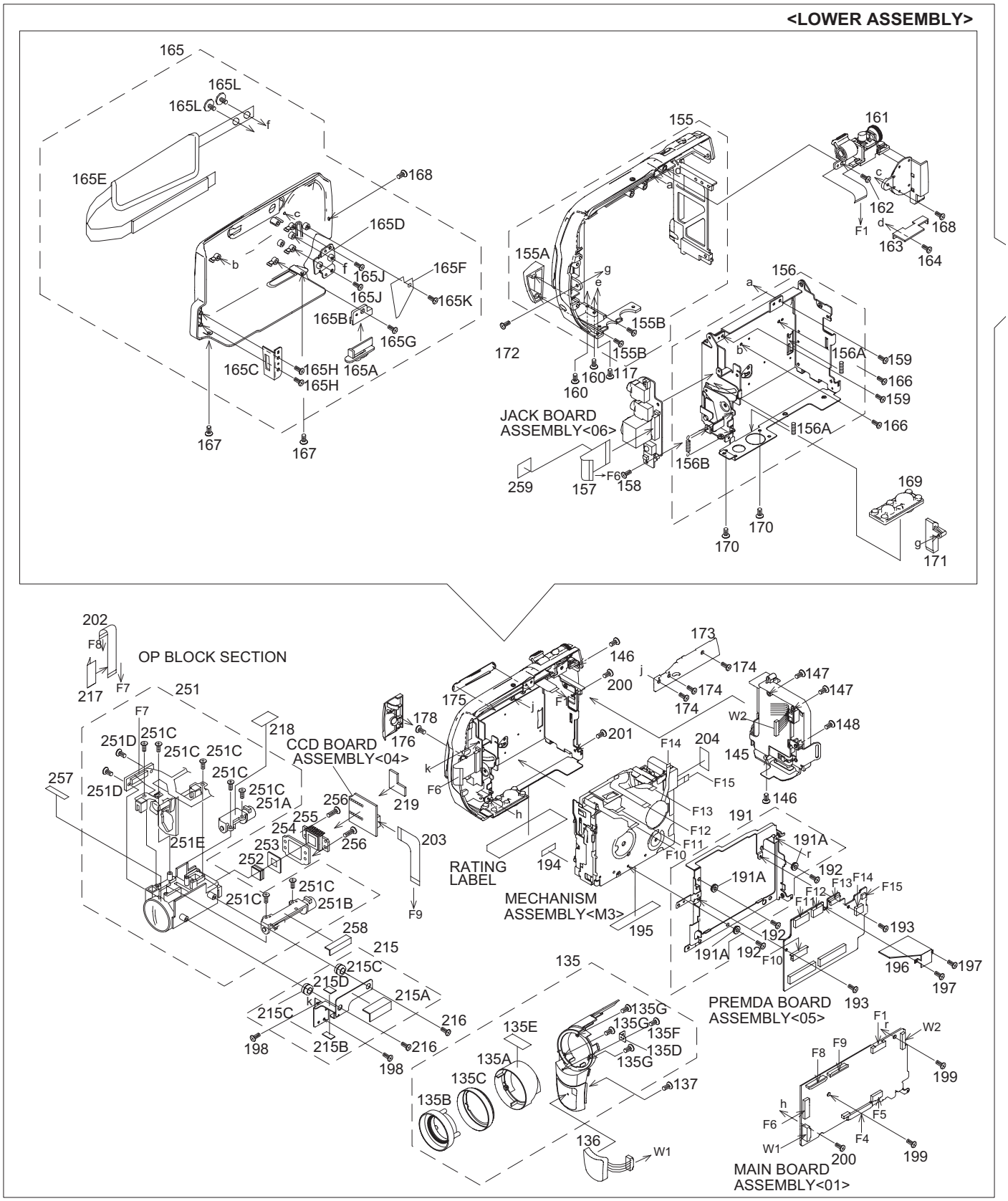
### 1. EXPLODED VIEW

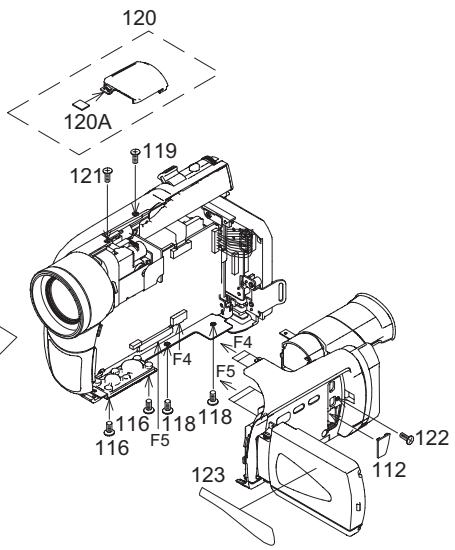
### 1.1 PACKING AND ACCESSORY ASSEMBLY <M1>

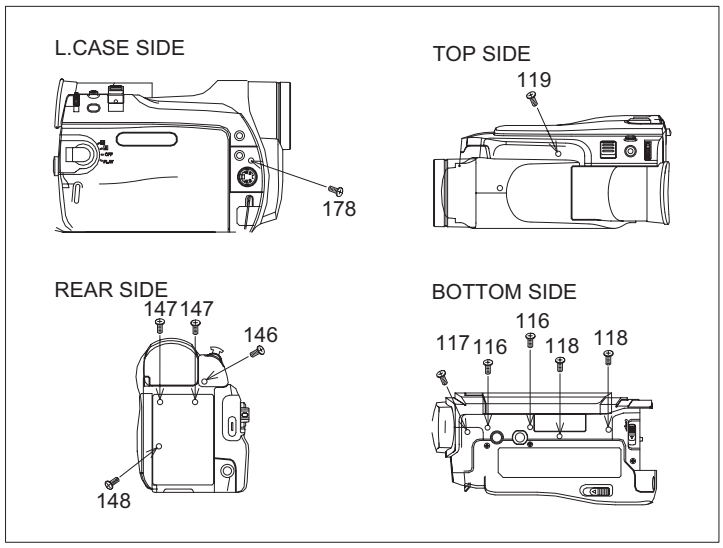
**The instruction manual to be provided with this product will differ according to the destination.**



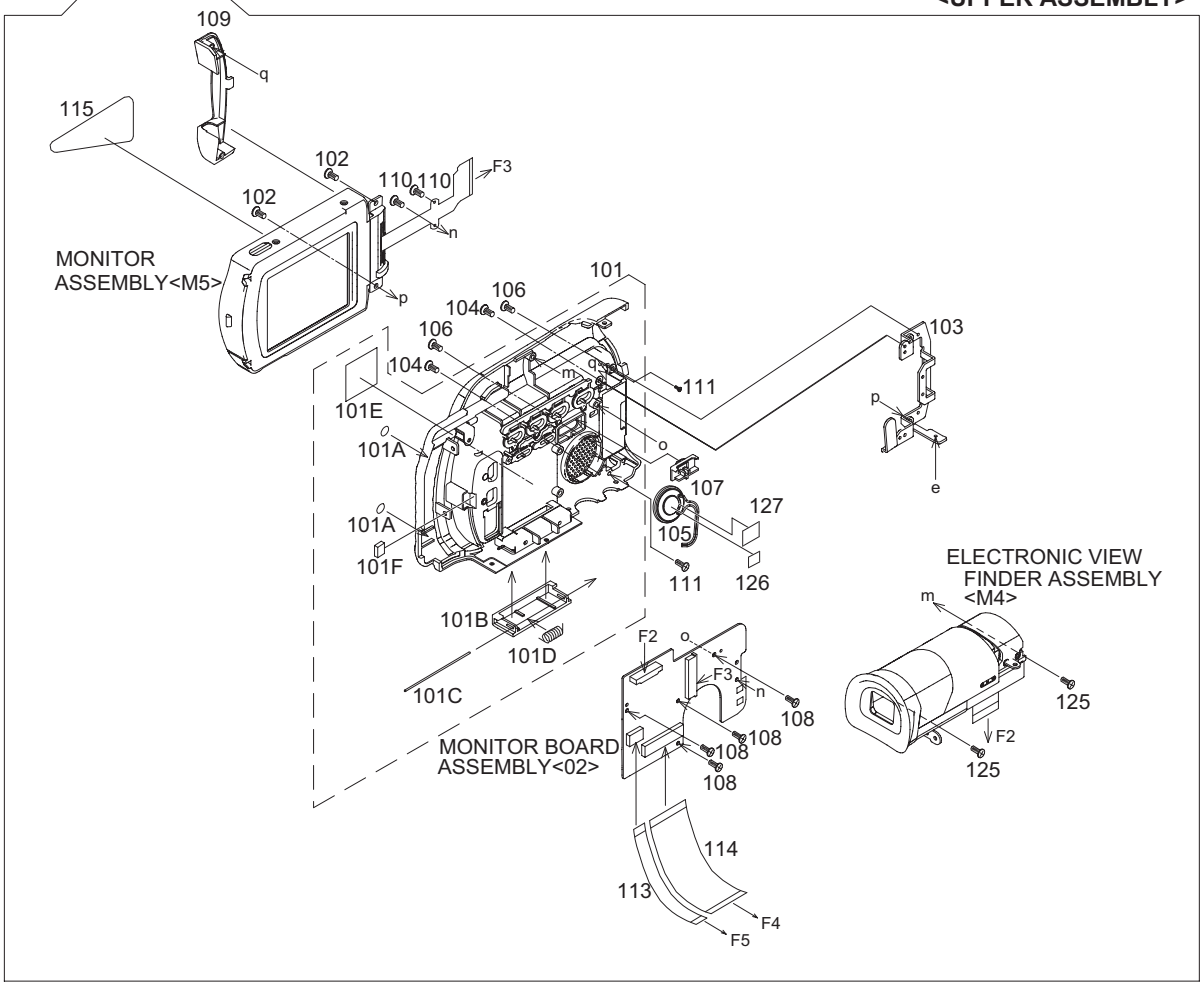
## 1.2 FINAL ASSEMBLY <M2>



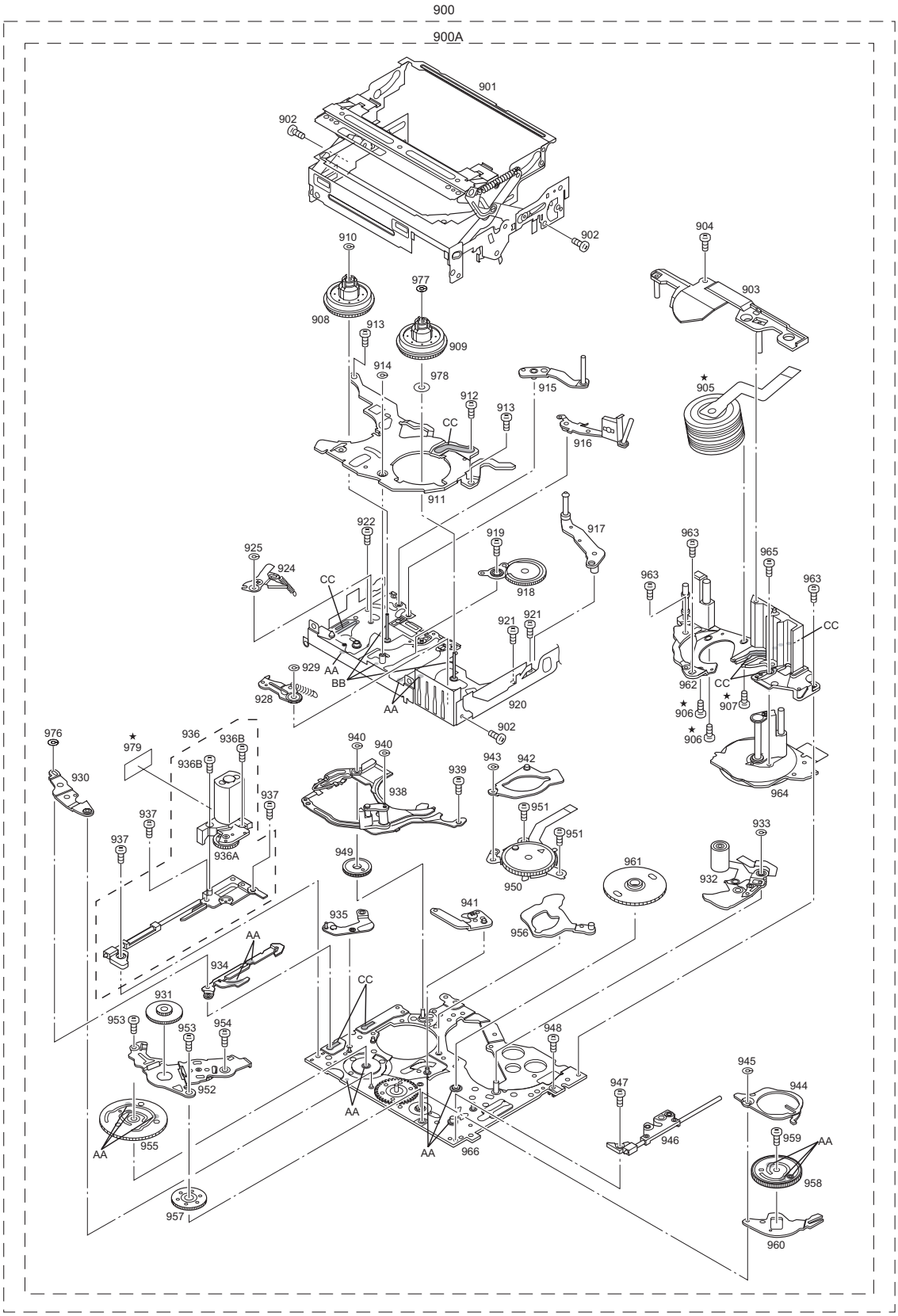



**<UPPER ASSEMBLY>**



## 1.3 MECHANISM ASSEMBLY <M3>

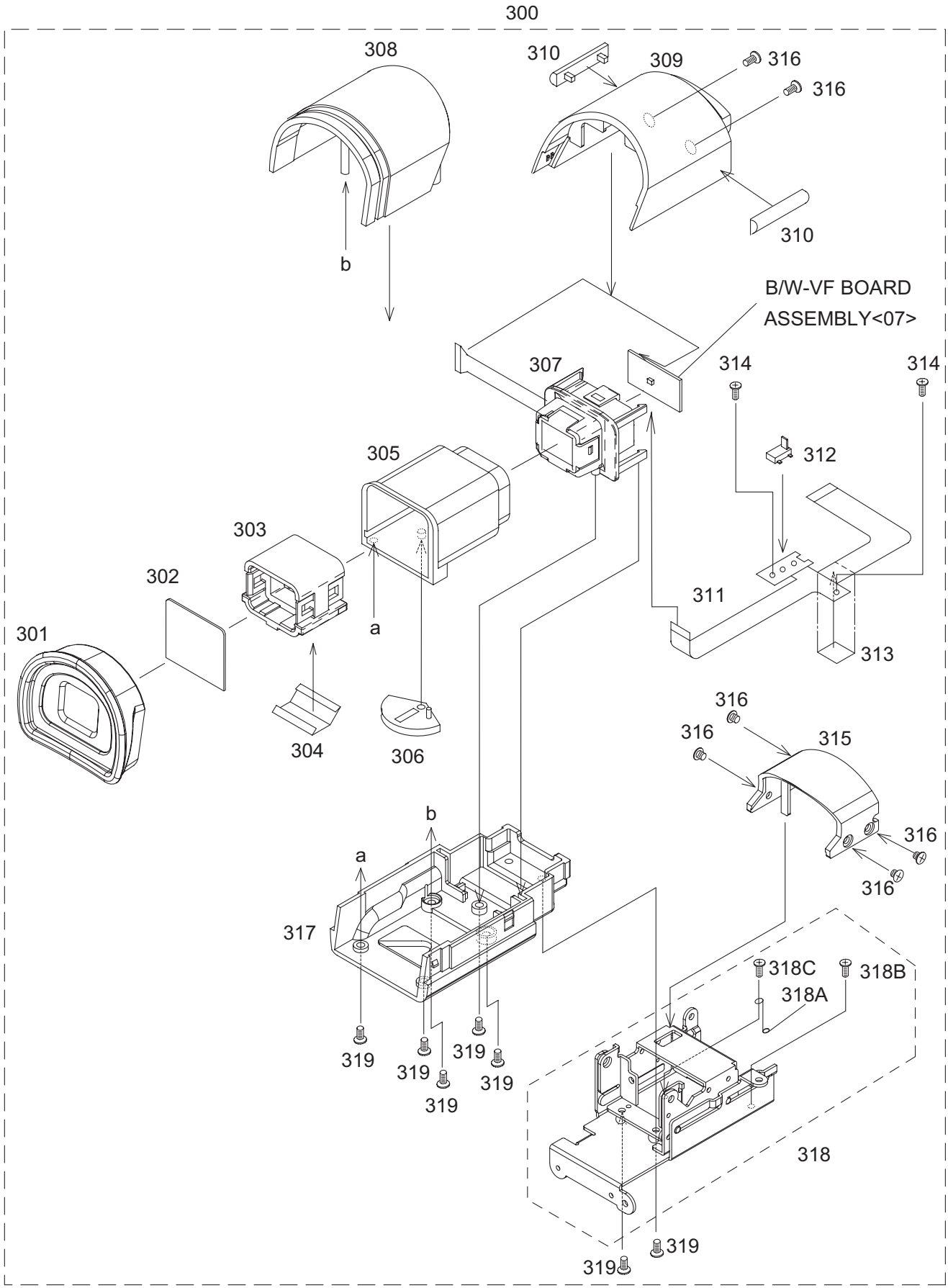



| Classification | Part No. | Symbol in drawing |
|---|---|---|
| Grease | KYODO-SH-JB | AA |
| Oil | YTU94027 | BB |
| Grease (HANARL) | RX-410R | CC |

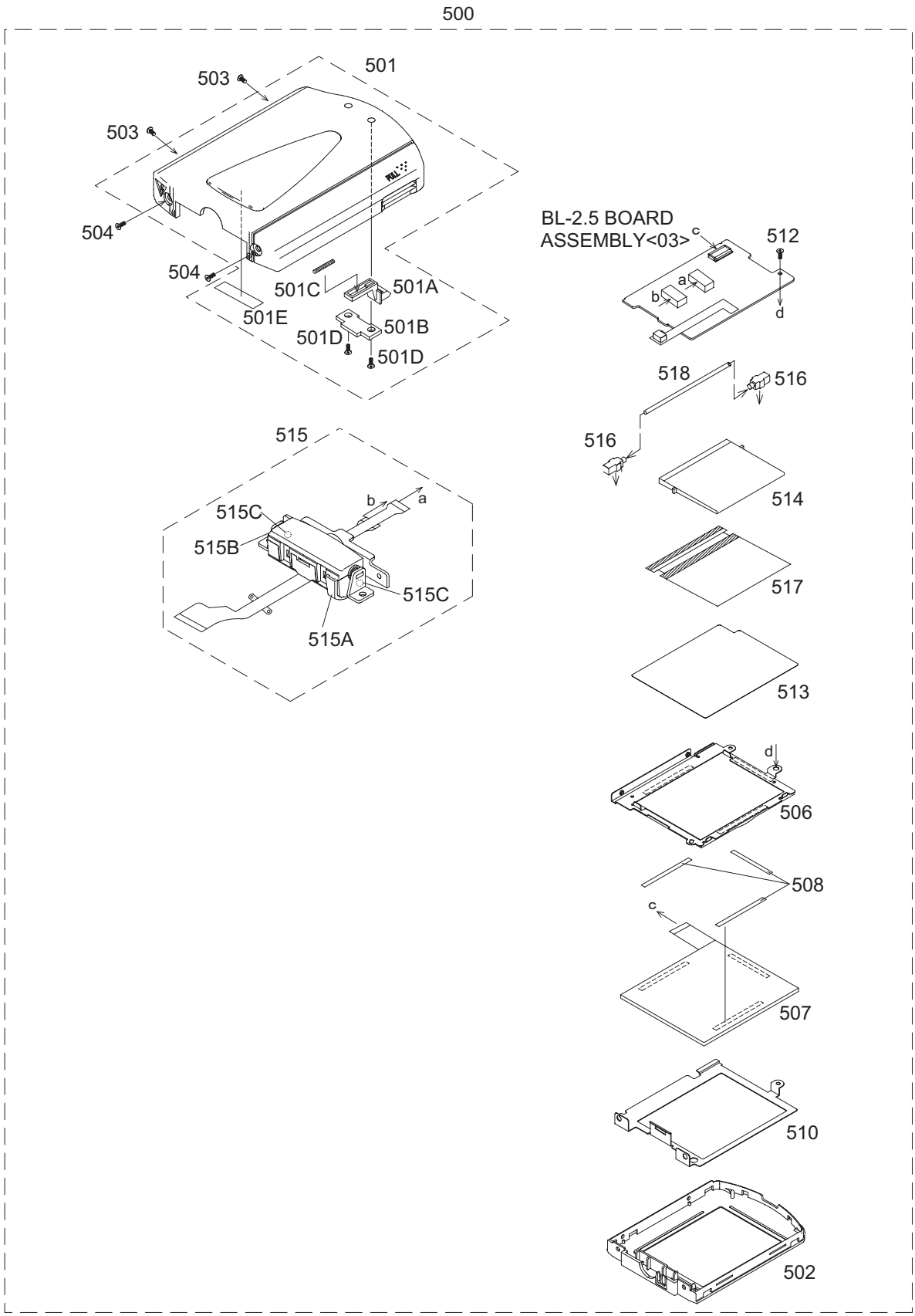
**NOTE1:** The section marked in **AA** and **BB**, **CC** indicate lubrication and greasing areas.

**NOTE2:** Mark ⋆ is not contained in 900A.

## 1.4 ELECTRONIC VIEWFINDER ASSEMBLY <M4>



## 1.5 MONITOR ASSEMBLY (2.5 INCH) <M5>



| MODEL | MARK | MODEL | MARK |
|---|---|---|---|
| GR-D70EK | A | GR-D70EY | C |
| GR-D70EX | B | GR-D70EZ | D |

## 2. PARTS LIST

### PACKING AND ACCESSORY ASSEMBLY <M1>

| ⚠ | Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|---|
| | 1 | LY33063-013A | PACKING CASE | | |
| | 2 | LY33065-001B | CUSHION | | A |
| | 2 | LY33065-001C | CUSHION | | B,C,D |
| | 3 | LY30023-027A | POLY BAG | | |
| | 4 | YQM30061-3 | POLY BAG | | A |
| | 4 | QPA02003506 | POLY BAG | 20cm x 35cm | B,C,D |
| ⚠ | 5 | LYT1145-001A | INST BOOK | (ENGLISH) | A |
| ⚠ | 5 | LYT1145-003A | INST BOOK | (FRENCH) | B |
| ⚠ | 5 | LYT1145-004A | INST BOOK | (DUTCH) | B |
| ⚠ | 5 | LYT1145-005A | INST BOOK | (SPANISH) | B |
| ⚠ | 5 | LYT1145-006A | INST BOOK | (ITALIAN) | B |
| ⚠ | 5 | LYT1145-002A | INST BOOK | (GERMAN) | B,C |
| ⚠ | 5 | LYT1145-007A | INST BOOK | (DANISH) | C |
| ⚠ | 5 | LYT1145-008A | INST BOOK | (FINNISH) | C |
| ⚠ | 5 | LYT1145-009A | INST BOOK | (SWEDISH) | C |
| ⚠ | 5 | LYT1145-010A | INST BOOK | (NORWEGIAN) | C |
| ⚠ | 5 | LYT1145-011A | INST BOOK | (RUSSIAN) | D |
| ⚠ | 5 | LYT1145-012A | INST BOOK | (CZECH) | D |
| ⚠ | 5 | LYT1145-013A | INST BOOK | (POLISH) | D |
| ⚠ | 5 | LYT1145-014A | INST BOOK | (HUNGARIAN) | D |
| | 6 | LYT1085-001A | INST BOOK | (SOFT.ENGLISH) | A |
| | 6 | LYT1085-003A | INST BOOK | (SOFT.FRENCH) | B |
| | 6 | LYT1085-004A | INST BOOK | (SOFT.DUTCH) | B |
| | 6 | LYT1085-005A | INST BOOK | (SOFT.SPANISH) | B |
| | 6 | LYT1085-006A | INST BOOK | (SOFT.ITALIAN) | B |
| | 6 | LYT1085-002A | INST BOOK | (SOFT.GERMAN) | B,C |
| | 6 | LYT1085-007A | INST BOOK | (SOFT.DANISH) | C |
| | 6 | LYT1085-008A | INST BOOK | (SOFT.FINNISH) | C |
| | 6 | LYT1085-009A | INST BOOK | (SOFT.SWEDISH) | C |
| | 6 | LYT1085-010A | INST BOOK | (SOFT.NORWEGIAN) | C |
| | 6 | LYT1085-011A | INST BOOK | (SOFT.RUSSIAN) | D |
| | 7 | BT-54008-4 | WARRANTY CARD | | A |
| | 7 | BT-54013-5 | WARRANTY CARD | | B,C,D |
| | 8 | YU30878 | REGIST. CARD | | A |
| | 9 | LYT0194-001B | Q.CARD(JUK) | | A |
| | 20 | QPA01703005 | POLY BAG | 17cm x 30cm | |
| | 23 | QAM0451-001 | USB CABLE | | |
| | 24 | QQR0491-002 | FERRITE CORE | TDK (BLACK) | |
| | 25 | QAM0212-001 | A/V CABLE | | |
| | 26 | QQR0918-002 | CORE FILTER | | |
| ⚠ | 27 | LY20955-001C | AC ADAPTER | AP-V13E | |
| ⚠ | 27 or | LY20956-001B | AC ADAPTER | AP-V11E | |
| | 28 | QQR0917-002 | CORE FILTER | | |
| ⚠ | 29 | QMPP110-190-JR | POWER CORD(EK) | 1.9m BLACK | A |
| ⚠ | 29 | QMPL120-190-JR | POWER CORD(EU) | 1.9m BLACK | B,C,D |
| | 30 | QPA02503505P | POLY BAG | 25cm x 35cm | |
| ⚠ | 31 | LY32566-001A | BATT.PACK ASSY | BN-V408U-B | |
| | 32 | LY20186-004A | SHOULDER STRAP | | |
| | 33 | LY21020-001A | REMOCON | RM-V718U | |
| | 34 | QQR0491-002 | FERRITE CORE | TDK (BLACK) | |
| | 36 | LY44002-001B | CAP(HOOD)ASSY | | |
| | 37 | LY32210-051A | CD ROM ASSY | | |
| | 39 | QAM0404-002 | MEMORY CARD* | | |
| | 40 | QQR0491-002 | FERRITE CORE | TDK (BLACK) | |
| | 41 | QAM0302-001 | ADAPTOR PLUG | | |

***NOTE:**
DATA FILE is not contained in MEMORY CARD of the service part.

### FINAL ASSEMBLY <M2>

| ⚠ | Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|---|
| | 101 | LY20941-004M | U.CASE(2.5)ASSY | | |
| | 101A | LY40664-001A | SPACER | (x2) | |
| | 101B | LY33051-001D | COVER(SD) | | |
| | 101C | LY43977-001A | SHAFT | | |
| | 101D | LY43978-001A | SPRING | | |
| | 101E | LY33042-001A | C.LABEL(VF) | | |
| | 101F | LY30030-0F2A | SPACER(A) | | |
| | 102 | LY30018-0D6A | SPECIAL SCREW | (x2) | |
| | 103 | LY33044-001D | BKT(HINGE2.5) | | |
| | 104 | LY30018-096A | SPECIAL SCREW | (x2) | |
| | 105 | QAS0126-001 | SPEAKER | | |
| | 106 | LY30018-017A | SPECIAL SCREW | (x2) | |
| | 107 | LY33048-001A | KNOB(SLIDE) | | |
| | 108 | LY30018-059A | SPECIAL SCREW | (x4) | |
| | 109 | LY33049-002A | COVER(UPPER2.5) | | |
| | 110 | LY30018-056A | SPECIAL SCREW | (x2) | |
| | 111 | LY30018-0E6A | SPECIAL SCREW | (x2) | |
| | 112 | LY33050-002C | COVER(JIG) | | |
| | 113 | QUQ105-1007AA | FFC WIRE MONI CN 762-MAIN CN103 | | |
| | 114 | QUQ105-4007AA | FFC WIRE MONI CN761-MAIN CN101 | | |
| | 115 | LY33009-001A | ORNAMENT(2.5 1) | | |
| | 116 | LY30018-0E6A | SPECIAL SCREW | (x2) | |
| | 117 | LY30018-0A1A | SPECIAL SCREW | | |
| | 118 | LY30018-096A | SPECIAL SCREW | (x2) | |
| | 119 | LY30018-096A | SPECIAL SCREW | | |
| | 120 | LY33025-001B | TOP COVER ASSY | | |
| | 120A | LY40162-001A | BKT | | |
| | 121 | LY30018-096A | SPECIAL SCREW | | |
| | 122 | LY30018-096A | SPECIAL SCREW | | |
| | 123 | LY44187-003A | STICKER(2) | | |
| | 125 | LY30018-0E6A | SPECIAL SCREW | (x2) | |
| | 126 | LY30030-0E3B | SPACER(A) | | |
| | 127 | LY30030-0E5A | SPACER(A) | | |
| | 135 | LY20943-002E | F.COVER ASSY | | |
| | 135A | LY33056-001B | HOOD | | |
| | 135B | LY33057-001A | RING | | |
| | 135C | LY33058-001A | HOOD(SCREW) | | |
| | 135D | LY33059-001B | BKT(FRONT) | | |
| | 135E | LY44186-002A | STICKER(1) | | |
| | 135F | LY30018-0E6A | SPECIAL SCREW | | |
| | 135G | LY30018-052A | SPECIAL SCREW | (x3) | |
| | 136 | LY20944-001B | MIC | | |
| | 137 | LY30018-0G6A | SPECIAL SCREW | | |
| ⚠ | 145 | LY20938-001E | REAR UNIT | | |
| | 146 | LY30018-0G6A | SPECIAL SCREW | (x2) | |
| | 147 | LY30018-0J1A | SPECIAL SCREW | (x2) | |
| | 148 | LY30018-0H3A | SPECIAL SCREW | | |
| | 155 | LY20935-002E | LOWER CASE ASSY | | |
| | 155A | LY33402-001A | COVER(LOWER) | | |
| | 155B | LY30018-0E6A | SPECIAL SCREW | (x2) | |
| | 156 | LY20939-001F | ARM ASSY | | |
| | 156A | LY30002-046B | COMPRES. SPRING | (x2) | |
| | 156B | LY43973-001A | TENSION SPRING | | |
| | 157 | QUQ105-2203AA | FFC WIRE JACK CN501-MAIN CN102 | | |
| | 158 | LY30018-096A | SPECIAL SCREW | | |
| | 159 | LY30018-059A | SPECIAL SCREW | (x2) | |
| | 160 | LY30018-096A | SPECIAL SCREW | (x2) | |
| | 161 | LY10453-001E | ZOOM UNIT | | |
| | 162 | LY30018-0E6A | SPECIAL SCREW | | |
| | 163 | LY33395-001A | BRACKET(ZOOM) | | |
| | 164 | LY30018-059A | SPECIAL SCREW | | |
| | 165 | LY20937-003B | C.COVER ASSY | | |
| | 165A | LY33027-001B | KNOB(LOCK) | | |
| | 165B | LY33028-001A | HOLDER(LOCK) | | |
| | 165C | LY33397-001A | HOOK(G.B) | | |
| | 165D | LY33039-001A | BKT(G.BELT) | | |
| | 165E | LY20945-003A | GRIP BELT | | |
| | 165F | LY44178-001A | SHEET(C.COV) | | |
| | 165G | LY30018-0E6A | SPECIAL SCREW | | |
| | 165H | QYSLSF2040D | TAP SCREW | 2mm x 4mm | (x2) |
| | 165J | QYSLSF2040D | TAP SCREW | 2mm x 4mm | (x2) |
| | 165K | QYSLSF2040D | TAP SCREW | 2mm x 4mm | |
| | 165L | LY30018-0H1A | SPECIAL SCREW | | (x2) |
| | 166 | LY30018-0K3A | SPECIAL SCREW | | (x2) |
| | 167 | LY30018-096A | SPECIAL SCREW | | (x2) |
| | 168 | LY30018-059A | SPECIAL SCREW | | (x2) |
| | 169 | LY31019-001A | BASE | | |
| | 170 | LY30018-0E6A | SPECIAL SCREW | | (x2) |
| | 171 | LY33396-001B | HOLDER(JACK) | | |
| | 172 | LY30018-0E6A | SPECIAL SCREW | | |
| | 173 | LY33037-001B | COVER(ZOOM) | | |
| | 174 | LY30018-084A | SPECIAL SCREW | | (x3) |
| | 175 | LY33029-001B | COVER(ADJUST) | | |
| | 176 | LY33024-001C | COVER(JACK) | | |
| | 178 | LY30018-017A | SPECIAL SCREW | | |
| | 191 | LY33019-001B | BKT(MECHA)ASSY | | |

| MODEL | MARK | MODEL | MARK |
|---|---|---|---|
| GR-D70EK | A | GR-D70EY | C |
| GR-D70EX | B | GR-D70EZ | D |

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| 191A | LY42796-003A | BUSH | (x3) | |
| 192 | LY30019-028A | SPECIAL SCREW | (x3) | |
| 193 | LY30018-056A | SPECIAL SCREW | (x2) | |
| 194 | LY40699-002A | LABEL(PUSH) | | |
| 195 | LY32001-002A | LABEL(HOUSING) | | |
| 196 | LY33388-001C | SHIELD COVER(PR) | | |
| 197 | QYSPSPT1414M | SCREW | 1.4mm x 1.4mm(x2) | |
| 198 | LY30018-096A | SPECIAL SCREW | (x2) | |
| 199 | LY30019-038A | SPECIAL SCREW | (x2) | |
| 200 | LY30018-096A | SPECIAL SCREW | (x2) | |
| 201 | LY30018-017A | SPECIAL SCREW | | |
| 202 | QUQ105-24X8AA | FPC WIRE OP BLOCK-MAIN CN108 | | |
| 203 | QAL0465-001 | FPC CCD CN501-MAIN CN1 | | |
| 215 | LY43965-001D | BKT(OP)ASSY | | |
| 215A | LY30030-095A | SPACER(A) | | |
| 215B | LY30030-096A | SPACER(A) | | |
| 215C | LY43966-001A | RUBBER(OP) | (x2) | |
| 215D | LY30030-0E5A | SPACER(A) | | |
| 216 | LY30018-0G9A | SPECIAL SCREW | (x2) | |
| 217 | LY30030-057A | SPACER(A) | | |
| 218 | LY30030-050A | SPACER(A) | | |
| 219 | LY30030-060A | SPACER(A) | | |
| 251 | LY33085-001F | OP BLOCK ASSY | | |
| 251A | LY30724-001B | FOCUS MOTOR | | |
| 251B | LY30723-001B | ZOOM MOTOR | | |
| 251C | PTY33085-001 | SCREW | (x7) | |
| 251D | PTY31727-116 | SCREW | (x2) | |
| 251E | PTY33085-007 | IRIS MOTOR UNIT | | |
| 252 | LY44120-001A | OP LPF | | |
| 253 | LY44005-001A | SHEET | | |
| 254 | LY33288-001A | SPACER | | |
| 255 | LYH30446-002A | CCD BASE ASSY | | |
| 256 | LY30018-0E7A | SPECIAL SCREW | (x2) | |
| 257 | LY30030-093A | SPACER(A) | | |
| 258 | LY30030-094A | SPACER(A) | | |
| 259 | LY30029-0Q7A | SPACER(A) | | |

## MECHANISM ASSEMBLY <M3>

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| 900 | YMA0029H | MECHA(A)ASSY | | |
| 900A | YMA0029D | MECHA(A)ASSY | | |
| 901 | LY32870-001G | CASSETTEHOUSING ASSY | | |
| 902 | YQ43893-8 | MINI SCREW | (x3) | |
| 903 | LYH30420-001A | UPPER BASE ASSY | | |
| 904 | QYSPSPU1425M | SCREW | | |
| 905 | YDV2102B | DRUM ASSY | | |
| 906 | LY42820-001A | DAMP.SCREW ASSY | (x2) | |
| 907 | LY42820-002A | DAMP.SCREW ASSY | | |
| 908 | LY31538-001F | REEL DISK ASSY | | |
| 909 | LY31538-002H | REEL DISK ASSY | | |
| 910 | YQ44246 | SLIT WASHER | | |
| 911 | LY10372-001D | REEL COVER ASSY | | |
| 912 | LY42120-002A | MINI SCREW | | |
| 913 | LY41945-003A | MINI SCREW | (x2) | |
| 914 | YQ44246 | SLIT WASHER | | |
| 915 | LY43725-001D | TENSION ARM ASSY | | |
| 916 | LYH40269-001A | SLANT POLE ARM ASSY | | |
| 917 | LY43731-001F | TU ARM ASSY | | |
| 918 | LY31531-001D | SWING ARM ASSY | | |
| 919 | YQ43893 | MINI SCREW | | |
| 920 | LYH30424-001A | SLIDE DECK FINAL ASSY | | |
| 921 | YQ43893 | MINI SCREW | (x2) | |
| 922 | LY43023-001A | MINI SCREW | | |
| 924 | LYH30419-001A | PAD ARM ASSY | | |
| 925 | YQ44246 | SLIT WASHER | | |
| 928 | LYH40270-001A | TU BRAKE ASSY | | |
| 929 | YQ44246 | SLIT WASHER | | |
| 930 | LY43684-001A | TENSION CONTROL LEVER ASSY | | |
| 931 | LY32861-001A | CENTER GEAR | | |
| 932 | LY31516-001F | PINCH ROLLER ARM FINAL ASSY | | |
| 933 | YQ44246 | SLIT WASHER | | |
| 934 | LY43681-001A | TENSION CONTROL PLATE ASSY | | |
| 935 | LY43687-001A | BRAKE CONTROL LEVER ASSY | | |

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| 936 | LYH30421-001A | MOTOR BRACKET ASSY | | |
| 936A | QAR0138-001 | LOADING MOTOR | | |
| 936B | LY41940-001A | TAPPING SCREW | (x2) | |
| 937 | YQ43893 | MINI SCREW | (x3) | |
| 938 | LYH30422-001A | GUIDE RAIL ASSY | | |
| 939 | YQ43893 | MINI SCREW | | |
| 940 | YQ44246 | SLIT WASHER | (x2) | |
| 941 | LY32843-001A | SLIDE LEVER2 ASSY | | |
| 942 | LY43690-001A | LOADING PLATE ASSY | | |
| 943 | YQ44246 | SLIT WASHER | | |
| 944 | LY32858-001A | EJECT LEVER | | |
| 945 | YQ44246 | SLIT WASHER | | |
| 946 | LYH40271-001A | BASE R ASSY | | |
| 947 | YQ43893 | MINI SCREW | | |
| 948 | LY41945-001B | MINI SCREW | | |
| 949 | LY43665-001A | MODE GEAR | | |
| 950 | QSW0876-003 | ROTARY ENCODER | | |
| 951 | YQ43893 | MINI SCREW | (x2) | |
| 952 | LY32860-001A | GEAR COVER ASSY | | |
| 953 | YQ43893 | MINI SCREW | (x2) | |
| 954 | YQ43893-4 | MINI SCREW | | |
| 955 | LY43676-001A | MAIN CAM ASSY | | |
| 956 | LY41941-001B | SLIDE ARM ASSY | | |
| 957 | LY43678-001A | CONNECT GEAR 2 | | |
| 958 | LY41954-001C | SUB CAM ASSY | | |
| 959 | LY42120-001A | MINI SCREW | | |
| 960 | LY43692-001A | CONTROL ARM ASSY | | |
| 961 | LY32859-001A | REEL GEAR 1 | | |
| 962 | LY31508-002B | DRUM BASE ASSY | | |
| 963 | QYSPSPU1425M | SCREW | 1.4mm x 2.5mm(x3) | |
| 964 | QAR0142-001 | CAPSTAN MOTOR | | |
| 965 | YQ43893 | MINI SCREW | | |
| 966 | LY10367-001D | MAIN DECK ASSY | | |
| 976 | YQ44246 | SLIT WASHER | | |
| 977 | YQ44246-6 | SLIT WASHER | | |
| 978 | LY42047-005A | WASHER | | |
| 979 | LY43987-001B | SPACER | | |

## ELECTRONIC VIEWFINDER ASSEMBLY<M4>

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| 300 | LY21043-001E | VF ASSY | | |
| 301 | LY32995-001B | EYE CUP | | |
| 302 | LY43961-001B | SHEET(LENS) | | |
| 303 | LY32472-001A | LENS ASSY | | |
| 304 | LY43868-001A | SPRING(LENS) | | |
| 305 | LY32993-001C | GUIDE LENS(VF) | | |
| 306 | LY33006-001C | LEVER(LENS) | | |
| 307 | LY33442-001B | LCD UNIT ASSY | | |
| 308 | LY20931-001B | U.CASE(VF)R | | |
| 309 | LY20930-001B | U.CASE(VF)F | | |
| 310 | LY33083-001A | PROTECTOR(VF) | (x2) | |
| 311 | QAL0466-002 | FPC | | |
| 312 | NSW0200-001X | LEVER SWITCH VF SW | | |
| 313 | LY30030-059B | SPACER(A) | | |
| 314 | LY30018-031A | SPECIAL SCREW | (x2) | |
| 315 | LY32996-001B | COVER(VF) | | |
| 316 | LY30018-022A | SPECIAL SCREW | (x6) | |
| 317 | LY20929-001C | B.CASE(VF) | | |
| 318 | LY33076-001E | VF HINGE ASSY | | |
| 318A | LY43962-001C | TOR.SPRING | | |
| 318B | LY30019-048A | SPECIAL SCREW | | |
| 319 | LY30018-084A | SPECIAL SCREW | (x7) | |

| MODEL | MARK | MODEL | MARK |
|---|---|---|---|
| GR-D70EK | A | GR-D70EY | C |
| GR-D70EX | B | GR-D70EZ | D |

## MONITOR ASSEMBLY (2.5 INCH) <M5>

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| 500 | LY21042-005B | MONITOR ASSY | | |
| 501 | LY20932-004E | M.COVER(2.5)ASSY | | |
| 501A | LY33007-001C | KNOB(LOCK)M | | |
| 501B | LY33008-001A | HOLDER(LOCK)M | | |
| 501C | LY30002-047A | COMPRES. SPRING | | |
| 501D | LY30018-0C8A | SPECIAL SCREW | (x2) | |
| 501E | LY30030-0E5A | SPACER(A) | | |
| 502 | LY10407-001C | MONI.CASE(2.5) | | |
| 503 | QYSPSPT1730R | SCREW | 1.7mm x 3mm(x2) | |
| 504 | LY30018-0K9A | SPECIAL SCREW | (x2) | |
| 506 | LY33011-001C | LCD FRAME(2.5) | | |
| 507 | QLD0262-001 | LCD MODULE | | |
| 508 | LY30029-0R5A | SPACER(A) | (x3) | |
| 510 | LY33010-001A | SHIELD CASE(2.5) | | |
| 512 | QYSPSPT1720R | SCREW | 1.7mm x 2mm | |
| 513 | LY33012-001A | DIFF.SHEET(2.5) | | |
| 514 | LY43938-001A | LIGHT SCREEN | | |
| 515 | LY33013-003B | MONI.HINGE ASSY | | |
| 515A | LY33015-002A | HINGE COVER(U) | | |
| 515B | LY32969-002A | HINGE COVER(L) | | |
| 515C | LY30018-0K1A | SPECIAL SCREW | (x2) | |
| 516 | LY43936-001A | HOLDER(LAMP) | (x2) | |
| 517 | LY43396-001A | SHEET(REFLECT) | | |
| 518 | QLL0142-001 | LAMP | | |

## MAIN BOARD ASSEMBLY <01>

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| PW1 | YB10404I-03 | MAIN BOARD ASSY | | |
| IC1001 | MN103S33NJC | IC(MICRO C ROM) | | |
| IC1001 or | MN103SF33NY4JC | IC(MICRO C ROM) | | |
| IC1002 | MB90097PFV149-X | IC(MICRO C ROM) | | |
| IC1003 | SN74AHC1G00K-X | IC | | |
| IC1003 or | SN74AHC1G00DC-X | IC | | |
| IC1004 | S-89220ACNC-W | IC | | |
| IC1005 | X25330S8I-2.5-X | IC | | |
| IC1005 or | AT25320N-10SI-X | IC | | |
| IC1005 or | M95320-WMN6-X | IC | | |
| IC1005 or | 25LC320-I/SN-X | IC | | |
| IC1005 or | CAT25C32SI-X | IC | | |
| IC1006 | RS5C314-X | IC | | |
| IC1007 | IC-PST3423U-X | IC | | |
| IC1007 or | S-80823CNNB-X | IC | | |
| IC2101 | AK5355VT-X | IC | | |
| IC2201 | AK4564VQ | IC | | |
| IC3001 | JCY0152 | IC | | |
| IC3002 | BU2501FV-X | IC | | |
| IC3005 | JCY0136-X | IC | | |
| IC3701 | BA7665FS-X | IC | | |
| IC3731 | MM1504XN-X | IC | | |
| IC3801 | JCP8045 | IC | | |
| IC4201 | HD49340NP-X | IC | | |
| IC4202 | MM1613AN-X | IC | | |
| IC4301 | JCY0200 | IC | | |
| IC4302 | R1160N151B-X | IC | | |
| IC4802 | BA10358FVM-W | IC | | |
| IC4803 | BA10358FVM-W | IC | | |
| IC4804 | UPC358G2/5/-W | IC | | |
| IC4807 | SN74AHC2G66U-X | IC | | |
| IC4851 | UPD16879GS-X | IC | | |
| IC5501 | JCY0185 | IC | | |
| IC6001 | FA3698F | IC | | |
| IC6801 | R1224N102G-X | IC | | |
| IC8001 | TMS320DSC24GHKL | IC | | |
| IC8002 | K4S643232F-TC60 | IC | | |
| IC8002 or | HY57643220CT55 | IC | | |
| IC8002 or | HY57643220CT7 | IC | | |
| IC8003 | MBV160TE90PTA48 | IC(MICRO C ROM) | | |
| IC8003 or | MBV160T90PTA48 | IC(MICRO C ROM) | | |
| IC8004 | S-80842CNNB-W | IC | | |
| IC8006 | BU2288FV-X | IC | | |
| IC8301 | ISP1181ADGG-X | IC | | |
| Q1001 | DTA114EE-X | DIGI TRANSISTOR | | |
| Q1001 or | PDTA114EE-X | DIGI TRANSISTOR | | |
| Q1001 or | RN2102-X | DIGI TRANSISTOR | | |
| Q1001 or | BCR183T-X | DIGI TRANSISTOR | | |
| Q1002 | UMC3N-W | DIGI TRANSISTOR | | |
| Q1003 | UMC3N-W | DIGI TRANSISTOR | | |
| Q1004 | UMC3N-W | DIGI TRANSISTOR | | |
| Q1005 | DTC143XE-X | DIGI TRANSISTOR | | |
| Q1006 | UMC3N-W | DIGI TRANSISTOR | | |
| Q1007 | 2SC4617/QR/-X | TRANSISTOR | | |
| Q1007 or | BC847BT-X | TRANSISTOR | | |
| Q1008 | DTC124EE-X | DIGI TRANSISTOR | | |
| Q1008 or | PDTC124EE-X | DIGI TRANSISTOR | | |
| Q1008 or | BCR141T-X | DIGI TRANSISTOR | | |
| Q1009 | 2SJ347-X | MOS FET | | |
| Q2001 | UMX1N-W | PAIR TRANSISTOR | | |
| Q2001 or | BC847S-X | PAIR TRANSISTOR | | |
| Q2002 | UMX1N-W | PAIR TRANSISTOR | | |
| Q2002 or | BC847S-X | PAIR TRANSISTOR | | |
| Q2003 | UMX1N-W | PAIR TRANSISTOR | | |
| Q2003 or | BC847S-X | PAIR TRANSISTOR | | |
| Q2004 | UMX1N-W | PAIR TRANSISTOR | | |
| Q2004 or | BC847S-X | PAIR TRANSISTOR | | |
| Q2005 | UMX1N-W | PAIR TRANSISTOR | | |
| Q2005 or | BC847S-X | PAIR TRANSISTOR | | |
| Q2006 | UMX1N-W | PAIR TRANSISTOR | | |
| Q2006 or | BC847S-X | PAIR TRANSISTOR | | |
| Q2202 | UMX1N-W | PAIR TRANSISTOR | | |
| Q2202 or | BC847S-X | PAIR TRANSISTOR | | |
| Q2401 | 2SC4617/QR/-X | TRANSISTOR | | |

| MODEL | MARK | MODEL | MARK |
|---|---|---|---|
| GR-D70EK | A | GR-D70EY | C |
| GR-D70EX | B | GR-D70EZ | D |

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| Q2401 | or BC847BT-X | TRANSISTOR | | |
| Q2403 | 2SC4617/QR/-X | TRANSISTOR | | |
| Q2403 | or BC847BT-X | TRANSISTOR | | |
| Q3001 | 2SC4617/RS/-X | TRANSISTOR | | |
| Q3001 | or BC847BT-X | TRANSISTOR | | |
| Q3002 | 2SC4617/RS/-X | TRANSISTOR | | |
| Q3002 | or BC847BT-X | TRANSISTOR | | |
| Q3701 | UMT1N-W | PAIR TRANSISTOR | | |
| Q3701 | or XP4401-W | TRANSISTOR | | |
| Q3701 | or BC856S-X | PAIR TRANSISTOR | | |
| Q3702 | UMZ1N-W | PAIR TRANSISTOR | | |
| Q3702 | or XP4601-W | TRANSISTOR | | |
| Q3704 | 2SA1774/RS/-X | TRANSISTOR | | |
| Q3704 | or BC857BT-X | TRANSISTOR | | |
| Q3705 | UMT1N-W | PAIR TRANSISTOR | | |
| Q3705 | or XP4401-W | TRANSISTOR | | |
| Q3705 | or BC856S-X | PAIR TRANSISTOR | | |
| Q3731 | 2SC4617/RS/-X | TRANSISTOR | | |
| Q3731 | or 2SD2216J/RS/-X | TRANSISTOR | | |
| Q3731 | or BC847BT-X | TRANSISTOR | | |
| Q3732 | DTC144EE-X | DIGI TRANSISTOR | | |
| Q3732 | or UN9213J-X | DIGI TRANSISTOR | | |
| Q3732 | or BCR148T-X | DIGI TRANSISTOR | | |
| Q3733 | UMZ1N-W | PAIR TRANSISTOR | | |
| Q3733 | or XP4601-W | TRANSISTOR | | |
| Q3734 | 2SC4617/RS/-X | TRANSISTOR | | |
| Q3734 | or 2SD2216J/RS/-X | TRANSISTOR | | |
| Q3734 | or BC847BT-X | TRANSISTOR | | |
| Q3735 | UMZ1N-W | PAIR TRANSISTOR | | |
| Q3735 | or XP4601-W | TRANSISTOR | | |
| Q4801 | 2SC4655/BC/-X | TRANSISTOR | | |
| Q4802 | 2SC4617/RS/-X | TRANSISTOR | | |
| Q4802 | or BC847BT-X | TRANSISTOR | | |
| Q4803 | DTC144EE-X | DIGI TRANSISTOR | | |
| Q4803 | or BCR148T-X | DIGI TRANSISTOR | | |
| Q4804 | DTA144EE-X | DIGI TRANSISTOR | | |
| Q4804 | or BCR198T-X | DIGI TRANSISTOR | | |
| Q4805 | DTA143EE-X | DIGI TRANSISTOR | | |
| Q4805 | or BCR162T-X | DIGI TRANSISTOR | | |
| Q4806 | 2SC4617/QR/-X | TRANSISTOR | | |
| Q4806 | or BC847BT-X | TRANSISTOR | | |
| Q4851 | 2SC4617/RS/-X | TRANSISTOR | | |
| Q4851 | or BC847BT-X | TRANSISTOR | | |
| Q6101 | SSM5G01TU-X | MOS FET | | |
| Q6102 | 2SA1577/QR/-X | TRANSISTOR | | |
| Q6102 | or BC807-25W-X | TRANSISTOR | | |
| Q6201 | SSM5G01TU-X | MOS FET | | |
| Q6301 | SSM5G01TU-X | MOS FET | | |
| Q6302 | 2SA1577/QR/-X | TRANSISTOR | | |
| Q6302 | or BC807-25W-X | TRANSISTOR | | |
| Q6303 | 2SC4617/QR/-X | TRANSISTOR | | |
| Q6303 | or BC847BT-X | TRANSISTOR | | |
| Q6401 | SSM5G01TU-X | MOS FET | | |
| Q6501 | SSM5G01TU-X | MOS FET | | |
| Q6601 | CPH3314-X | MOS FET | | |
| Q6602 | UMX1N-W | PAIR TRANSISTOR | | |
| Q6602 | or HN1C01FU/G/-X | PAIR TRANSISTOR | | |
| Q6602 | or BC847S-X | PAIR TRANSISTOR | | |
| Q6603 | 2SA1577/QR/-X | TRANSISTOR | | |
| Q6603 | or BC807-25W-X | TRANSISTOR | | |
| Q6604 | DTC144EE-X | DIGI TRANSISTOR | | |
| Q6604 | or BCR148T-X | DIGI TRANSISTOR | | |
| Q6605 | UMT1N-W | PAIR TRANSISTOR | | |
| Q6605 | or HN1A01FU/G/-X | PAIR TRANSISTOR | | |
| Q6605 | or BC856S-X | PAIR TRANSISTOR | | |
| Q6606 | 2SC4617/QR/-X | TRANSISTOR | | |
| Q6606 | or BC847BT-X | TRANSISTOR | | |
| Q6701 | CPH3314-X | MOS FET | | |
| Q6801 | FML9-W | TRANSISTOR | | |
| Q8002 | 2SA1774/QR/-X | TRANSISTOR | | |
| Q8002 | or BC857BT-X | TRANSISTOR | | |
| D1001 | DA221-X | DIODE ARRAY | | |
| D3001 | EC2C01C-X | VARI CAP DIODE | | |
| D3002 | EC2C01C-X | VARI CAP DIODE | | |
| D3003 | EC2C01C-X | VARI CAP DIODE | | |
| D3004 | MA2Z720-X | SB DIODE | | |
| D5501 | 1SS355-X | SI DIODE | | |
| D6601 | RB481K-X | SB DIODE | | |
| D6602 | RB480Y-W | SB DIODE | | |
| D6701 | RB160M-30-X | SB DIODE | | |
| D6702 | RB160M-30-X | SB DIODE | | |
| ⚠ D6801 | RB715F-X | SB DIODE | | |
| D8001 | RB751V-40-X | SB DIODE | | |
| C1001 | NDCA1HJ-8R0W | C CAPACITOR | 8pF 50V J | |
| C1002 | NDCA1HJ-100W | C CAPACITOR | 10pF 50V J | |
| C1004 | NCFA1AZ-104W | C CAPACITOR | 0.1uF 10V Z | |
| C1005 | NCFA1AZ-104W | C CAPACITOR | 0.1uF 10V Z | |
| C1007 | NCFA1AZ-104W | C CAPACITOR | 0.1uF 10V Z | |
| C1008 | NCFA1AZ-104W | C CAPACITOR | 0.1uF 10V Z | |
| C1009 | NCFA1AZ-104W | C CAPACITOR | 0.1uF 10V Z | |
| C1010 | NCFA1AZ-104W | C CAPACITOR | 0.1uF 10V Z | |
| C1011 | NCFA1AZ-104W | C CAPACITOR | 0.1uF 10V Z | |
| C1012 | NCFA1AZ-104W | C CAPACITOR | 0.1uF 10V Z | |
| C1013 | NCFA1AZ-104W | C CAPACITOR | 0.1uF 10V Z | |
| C1014 | NCFA1AZ-104W | C CAPACITOR | 0.1uF 10V Z | |
| C1015 | NCFA1AZ-104W | C CAPACITOR | 0.1uF 10V Z | |
| C1019 | NCFA1HZ-103W | C CAPACITOR | 0.01uF 50V Z | |
| C1020 | NCBA1EK-682W | C CAPACITOR | 6800pF 25V K | |
| C1021 | NCBA1EK-682W | C CAPACITOR | 6800pF 25V K | |
| C1022 | NCFA1HZ-103W | C CAPACITOR | 0.01uF 50V Z | |
| C1024 | NCFA1HZ-103W | C CAPACITOR | 0.01uF 50V Z | |
| C1025 | NCFA1HZ-103W | C CAPACITOR | 0.01uF 50V Z | |
| C1029 | NCFA1HZ-103W | C CAPACITOR | 0.01uF 50V Z | |
| C1030 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C1032 | NCFA1HZ-103W | C CAPACITOR | 0.01uF 50V Z | |
| C1035 | NCFA1HZ-103W | C CAPACITOR | 0.01uF 50V Z | |
| C1036 | NCFA1AZ-104W | C CAPACITOR | 0.1uF 10V Z | |
| C1037 | NCFA1HZ-103W | C CAPACITOR | 0.01uF 50V Z | |
| C1038 | NCFA1HZ-103W | C CAPACITOR | 0.01uF 50V Z | |
| C1039 | NCFA1HZ-103W | C CAPACITOR | 0.01uF 50V Z | |
| C1040 | NDCA1HJ-100W | C CAPACITOR | 10pF 50V J | |
| C1041 | NCFA1AZ-104W | C CAPACITOR | 0.1uF 10V Z | |
| C1042 | NCFA1AZ-104W | C CAPACITOR | 0.1uF 10V Z | |
| C1043 | NCFA1AZ-104W | C CAPACITOR | 0.1uF 10V Z | |
| C1044 | NDCA1HJ-470W | C CAPACITOR | 47pF 50V J | |
| C1045 | NDCA1HJ-470W | C CAPACITOR | 47pF 50V J | |
| C1046 | NCF31AZ-105X | C CAPACITOR | 1uF 10V Z | |
| C1047 | NCFA1HZ-103W | C CAPACITOR | 0.01uF 50V Z | |
| C1048 | NCFA1HZ-103W | C CAPACITOR | 0.01uF 50V Z | |
| C1049 | NCFA1HZ-103W | C CAPACITOR | 0.01uF 50V Z | |
| C1050 | NCFA1HZ-103W | C CAPACITOR | 0.01uF 50V Z | |
| C1051 | NCB31CK-223X | C CAPACITOR | 0.022uF 16V K | |
| C1052 | NCB31CK-223X | C CAPACITOR | 0.022uF 16V K | |
| C1053 | NCB31CK-223X | C CAPACITOR | 0.022uF 16V K | |
| C1054 | NCB31CK-223X | C CAPACITOR | 0.022uF 16V K | |
| C1055 | NCFA1AZ-104W | C CAPACITOR | 0.1uF 10V Z | |
| C1064 | NBE20JM-226X | TA E CAPACITOR | 22uF 6.3V M | |
| C2105 | NCBA1HK-222W | C CAPACITOR | 2200pF 50V K | |
| C2106 | NCBA1HK-222W | C CAPACITOR | 2200pF 50V K | |
| C2107 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C2108 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C2109 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C2110 | NBE20JM-475X | TA E CAPACITOR | 4.7uF 6.3V M | |
| C2201 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C2202 | NCB30JK-105X | C CAPACITOR | 1uF 6.3V K | |
| C2203 | NCB30JK-105X | C CAPACITOR | 1uF 6.3V K | |
| C2204 | NCB30JK-105X | C CAPACITOR | 1uF 6.3V K | |
| C2205 | NCB30JK-105X | C CAPACITOR | 1uF 6.3V K | |
| C2209 | NCB30JK-105X | C CAPACITOR | 1uF 6.3V K | |
| C2210 | NCB30JK-105X | C CAPACITOR | 1uF 6.3V K | |
| C2211 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C2212 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C2213 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C2214 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C2215 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C2216 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C2217 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C2218 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C2223 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C2224 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C2401 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C2402 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C2403 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C2404 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |

| MODEL | MARK | MODEL | MARK |
|---|---|---|---|
| GR-D70EK | A | GR-D70EY | C |
| GR-D70EX | B | GR-D70EZ | D |

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| C2405 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C2406 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C2603 | NCBA1CK-153W | C CAPACITOR | 0.015uF 16V K | |
| C2604 | NCBA1CK-153W | C CAPACITOR | 0.015uF 16V K | |
| C2605 | NCBA1EK-472W | C CAPACITOR | 4700pF 25V K | |
| C2606 | NCBA1EK-472W | C CAPACITOR | 4700pF 25V K | |
| C2607 | NCBA1HK-102W | C CAPACITOR | 1000pF 50V K | |
| C2608 | NCBA1HK-102W | C CAPACITOR | 1000pF 50V K | |
| C2611 | NCB30JK-105X | C CAPACITOR | 1uF 6.3V K | |
| C2612 | NCB30JK-105X | C CAPACITOR | 1uF 6.3V K | |
| C2613 | NCB30JK-105X | C CAPACITOR | 1uF 6.3V K | |
| C2614 | NDCA1HJ-101W | C CAPACITOR | 100pF 50V J | |
| C2615 | NDCA1HJ-101W | C CAPACITOR | 100pF 50V J | |
| C3001 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C3003 | NCB30JK-105X | C CAPACITOR | 1uF 6.3V K | |
| C3005 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C3006 | NCB30JK-105X | C CAPACITOR | 1uF 6.3V K | |
| C3007 | NCB10JK-106X | C CAPACITOR | 10uF 6.3V K | |
| C3008 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C3009 | NCB30JK-105X | C CAPACITOR | 1uF 6.3V K | |
| C3011 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C3012 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C3013 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C3015 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C3016 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C3017 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C3020 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C3021 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C3022 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C3023 | NDCA1HJ-330W | C CAPACITOR | 33pF 50V J | |
| C3024 | NCBA1HK-102W | C CAPACITOR | 1000pF 50V K | |
| C3025 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C3026 | NCB30JK-105X | C CAPACITOR | 1uF 6.3V K | |
| C3027 | NCBA1EK-472W | C CAPACITOR | 4700pF 25V K | |
| C3028 | NDCA1EJ-271W | C CAPACITOR | 270pF 25V J | |
| C3029 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C3030 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C3031 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C3032 | NCBA1HK-102W | C CAPACITOR | 1000pF 50V K | |
| C3033 | NDCA1HJ-220W | C CAPACITOR | 22pF 50V J | |
| C3036 | NDCA1HJ-8R0W | C CAPACITOR | 8pF 50V J | |
| C3037 | NDCA1HJ-8R0W | C CAPACITOR | 8pF 50V J | |
| C3038 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C3039 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C3042 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C3043 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C3044 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C3045 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C3046 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C3047 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C3048 | NCB31CK-473X | C CAPACITOR | 0.047uF 16V K | |
| C3049 | NCBA1HK-222W | C CAPACITOR | 2200pF 50V K | |
| C3050 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C3055 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C3059 | NBE20GM-226X | TA E CAPACITOR | 22uF 4V M | |
| C3060 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C3064 | NCBA1HK-102W | C CAPACITOR | 1000pF 50V K | |
| C3066 | NCB30JK-105X | C CAPACITOR | 1uF 6.3V K | |
| C3067 | NCBA1HK-102W | C CAPACITOR | 1000pF 50V K | |
| C3069 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C3701 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C3702 | NDCA1HJ-560W | C CAPACITOR | 56pF 50V J | |
| C3703 | NDCA1HJ-270W | C CAPACITOR | 27pF 50V J | |
| C3704 | NDCA1HJ-680W | C CAPACITOR | 68pF 50V J | |
| C3705 | NDCA1HJ-270W | C CAPACITOR | 27pF 50V J | |
| C3706 | NCB30JK-105X | C CAPACITOR | 1uF 6.3V K | |
| C3707 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C3708 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C3709 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C3712 | NEA70GM-337X | E CAPACITOR | 330uF 4V M | |
| C3713 | NEA70GM-337X | E CAPACITOR | 330uF 4V M | |
| C3715 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C3731 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C3732 | NCBA1HK-102W | C CAPACITOR | 1000pF 50V K | |
| C3733 | NDCA1HJ-3R0W | C CAPACITOR | 3pF 50V J | |
| C3734 | NDCA1HJ-5R0W | C CAPACITOR | 5pF 50V J | |
| C3735 | NDCA1HJ-330W | C CAPACITOR | 33pF 50V J | |
| C3736 | NCBA1HK-102W | C CAPACITOR | 1000pF 50V K | |
| C3738 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C3739 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C3740 | NCB30JK-105X | C CAPACITOR | 1uF 6.3V K | |
| C3741 | NCB30JK-105X | C CAPACITOR | 1uF 6.3V K | |
| C3742 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C3743 | NDCA1HJ-3R0W | C CAPACITOR | 3pF 50V J | |
| C3744 | NDCA1HJ-5R0W | C CAPACITOR | 5pF 50V J | |
| C3745 | NDCA1HJ-330W | C CAPACITOR | 33pF 50V J | |
| C3746 | NCB20JM-475X | C CAPACITOR | 4.7uF 6.3V M | |
| C3747 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C3801 | NCB21AK-105X | C CAPACITOR | 1uF 10V K | |
| C3802 | NCB21AK-105X | C CAPACITOR | 1uF 10V K | |
| C3803 | NBE20GM-476X | TA E CAPACITOR | 47uF 4V M | |
| C3804 | NBE20GM-476X | TA E CAPACITOR | 47uF 4V M | |
| C3805 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C3806 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C3807 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C3808 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C3809 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C3810 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C3811 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C3812 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C3813 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C3814 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C3815 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C3816 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C3817 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C3818 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C3819 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C4201 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C4202 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4203 | NCB21AK-105X | C CAPACITOR | 1uF 10V K | |
| C4204 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4205 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4206 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C4207 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4208 | NCB30JK-105X | C CAPACITOR | 1uF 6.3V K | |
| C4209 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4210 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4211 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4212 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4213 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4214 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4216 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4301 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4302 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4303 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4304 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4305 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4306 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4307 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4308 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4309 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4310 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4311 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4312 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4313 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C4314 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4315 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4316 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C4317 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C4803 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C4804 | NCFA1AZ-104W | C CAPACITOR | 0.1uF 10V Z | |
| C4806 | NCFA1AZ-104W | C CAPACITOR | 0.1uF 10V Z | |
| C4808 | NCB30JK-105X | C CAPACITOR | 1uF 6.3V K | |
| C4809 | NCFA1AZ-104W | C CAPACITOR | 0.1uF 10V Z | |
| C4810 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C4811 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C4812 | NCFA1AZ-104W | C CAPACITOR | 0.1uF 10V Z | |
| C4813 | NCFA1AZ-104W | C CAPACITOR | 0.1uF 10V Z | |
| C4814 | NCFA1AZ-104W | C CAPACITOR | 0.1uF 10V Z | |
| C4815 | NCB31HK-152X | C CAPACITOR | 1500pF 50V K | |
| C4819 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C4851 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C4852 | NCFA1AZ-104W | C CAPACITOR | 0.1uF 10V Z | |
| C4853 | NBE21AM-335X | TA E CAPACITOR | 3.3uF 10V M | |
| C4854 | NBE21AM-106X | TA E CAPACITOR | 10uF 10V M | |
| C4855 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |

| MODEL | MARK | MODEL | MARK |
|---|---|---|---|
| GR-D70EK | A | GR-D70EY | C |
| GR-D70EX | B | GR-D70EZ | D |

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| C4858 | NDCA1HJ-330W | C CAPACITOR | 33pF 50V J | |
| C4859 | NCBA1CK-223W | C CAPACITOR | 0.022uF 16V K | |
| C4860 | NCBA1CK-223W | C CAPACITOR | 0.022uF 16V K | |
| C4861 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C4862 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C4864 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C4865 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C5501 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C5503 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C5504 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C5506 | NBE40GM-476X | TA E CAPACITOR | 47uF 4V M | |
| C5507 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C5508 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C5509 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C5510 | NBP21VM-105X | TA E CAPACITOR | 1uF 35V M | |
| C5511 | NBZ0003-475X | TA E CAPACITOR | 4.7uF 20V M | |
| C5512 | NBE21AM-106X | TA E CAPACITOR | 10uF 10V M | |
| C5513 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C5514 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C5515 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C5516 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C5517 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C5518 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C5519 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C6002 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C6003 | NEA71CM-106X | E CAPACITOR | 10uF 16V M | |
| C6004 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C6021 | NCB21CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C6022 | NCB21CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C6023 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C6024 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C6025 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C6026 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C6027 | NCBA1EK-472W | C CAPACITOR | 4700pF 25V K | |
| C6029 | NCBA1HK-102W | C CAPACITOR | 1000pF 50V K | |
| C6030 | NCBA1HK-102W | C CAPACITOR | 1000pF 50V K | |
| C6031 | NCBA1HK-102W | C CAPACITOR | 1000pF 50V K | |
| C6032 | NCBA1HK-102W | C CAPACITOR | 1000pF 50V K | |
| C6033 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C6034 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C6035 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C6036 | NDCA1HJ-101W | C CAPACITOR | 100pF 50V J | |
| C6037 | NCB21CK-473X | C CAPACITOR | 0.047uF 16V K | |
| C6038 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C6039 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C6040 | NCB31CK-473X | C CAPACITOR | 0.047uF 16V K | |
| C6041 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C6042 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C6043 | NCB31CK-223X | C CAPACITOR | 0.022uF 16V K | |
| C6044 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C6045 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C6101 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C6103 | NCB10JK-106X | C CAPACITOR | 10uF 6.3V K | |
| C6104 | NCBA1HK-102W | C CAPACITOR | 1000pF 50V K | |
| C6105 | NCBA1HK-561W | C CAPACITOR | 560pF 50V K | |
| C6106 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C6201 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C6203 | NCB10JK-106X | C CAPACITOR | 10uF 6.3V K | |
| C6204 | NCBA1EK-472W | C CAPACITOR | 4700pF 25V K | |
| C6301 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C6303 | NCB10JK-106X | C CAPACITOR | 10uF 6.3V K | |
| C6304 | NCBA1HK-102W | C CAPACITOR | 1000pF 50V K | |
| C6401 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C6403 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C6405 | NCB31CK-683X | C CAPACITOR | 0.068uF 16V K | |
| C6501 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C6503 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C6505 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C6601 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C6602 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C6603 | NCB11EK-105X | C CAPACITOR | 1uF 25V K | |
| C6605 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C6606 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C6607 | NCB11EK-105X | C CAPACITOR | 1uF 25V K | |
| C6608 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C6609 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C6701 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C6703 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| C6801 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C6802 | NBE40JM-476X | TA E CAPACITOR | 47uF 6.3V M | |
| C6804 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C6807 | NCB10JK-106X | C CAPACITOR | 10uF 6.3V K | |
| C6809 | NDCA1HJ-151W | C CAPACITOR | 150pF 50V J | |
| C8001 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C8002 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C8003 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C8004 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C8005 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C8006 | NBE20JM-476X | TA E CAPACITOR | 47uF 6.3V M | |
| C8007 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C8008 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C8010 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C8011 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C8014 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C8015 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C8016 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C8017 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C8018 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C8019 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C8020 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C8021 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C8022 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C8023 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C8024 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C8025 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C8026 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C8030 | NCBA1CK-103W | C CAPACITOR | 0.01uF 16V K | |
| C8301 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C8305 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C8306 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C8307 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C8310 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| C8311 | NCBA1AK-104W | C CAPACITOR | 0.1uF 10V K | |
| | | | | |
| R1001 | NRSA6AJ-105W | MG RESISTOR | 1MΩ 1/16W J | |
| R1002 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R1003 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R1006 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R1007 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R1008 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R1009 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R1010 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R1011 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R1012 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R1013 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R1014 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R1015 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R1016 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R1017 | NRSA6AJ-474W | MG RESISTOR | 470kΩ 1/16W J | |
| R1018 | NRSA6AJ-474W | MG RESISTOR | 470kΩ 1/16W J | |
| R1019 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R1020 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R1021 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R1022 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R1023 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R1024 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R1025 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R1027 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R1030 | NRSA6AJ-753W | MG RESISTOR | 75kΩ 1/16W J | |
| R1031 | NRSA6AJ-334W | MG RESISTOR | 330kΩ 1/16W J | |
| R1032 | NRSA6AJ-332W | MG RESISTOR | 3.3kΩ 1/16W J | |
| R1033 | NRSA6AJ-332W | MG RESISTOR | 3.3kΩ 1/16W J | |
| R1034 | NRSA6AJ-332W | MG RESISTOR | 3.3kΩ 1/16W J | |
| R1035 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R1037 | NRSA6AJ-561W | MG RESISTOR | 560Ω 1/16W J | |
| R1038 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R1039 | NRSA6AJ-152W | MG RESISTOR | 1.5kΩ 1/16W J | |
| R1040 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R1041 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R1042 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R1043 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R1044 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R1045 | NRSA6AJ-105W | MG RESISTOR | 1MΩ 1/16W J | |
| R1046 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R1047 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R1048 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |

| MODEL | MARK | MODEL | MARK |
|---|---|---|---|
| GR-D70EK | A | GR-D70EY | C |
| GR-D70EX | B | GR-D70EZ | D |

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| R1049 | NRSA6AJ-623W | MG RESISTOR | 62kΩ 1/16W J | |
| R1050 | NRSA6AJ-823W | MG RESISTOR | 82kΩ 1/16W J | |
| R1051 | NRSA6AJ-473W | MG RESISTOR | 47kΩ 1/16W J | |
| R1052 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R1053 | NRSA6AJ-222W | MG RESISTOR | 2.2kΩ 1/16W J | |
| R1054 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R1055 | NRSA6AJ-334W | MG RESISTOR | 330kΩ 1/16W J | |
| R1056 | NRSA6AJ-334W | MG RESISTOR | 330kΩ 1/16W J | |
| R1057 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R1058 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R1059 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R1060 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R1061 | NRSA6AJ-561W | MG RESISTOR | 560Ω 1/16W J | |
| R1062 | NRSA6AJ-224W | MG RESISTOR | 220kΩ 1/16W J | |
| R1063 | NRSA6AJ-472W | MG RESISTOR | 4.7kΩ 1/16W J | |
| R1064 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R1065 | NRSA6AJ-153W | MG RESISTOR | 15kΩ 1/16W J | |
| R1066 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R1067 | NRSA6AJ-334W | MG RESISTOR | 330kΩ 1/16W J | |
| R1068 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R1069 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R1070 | NRSA6AJ-154W | MG RESISTOR | 150kΩ 1/16W J | |
| R1071 | NRSA6AJ-272W | MG RESISTOR | 2.7kΩ 1/16W J | |
| R1072 | NRSA6AJ-183W | MG RESISTOR | 18kΩ 1/16W J | |
| R1073 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R1074 | NRSA6AJ-472W | MG RESISTOR | 4.7kΩ 1/16W J | |
| R1075 | NRSA6AJ-473W | MG RESISTOR | 47kΩ 1/16W J | |
| R1076 | NRSA6AJ-473W | MG RESISTOR | 47kΩ 1/16W J | |
| R1077 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R1078 | NRSA6AJ-393W | MG RESISTOR | 39kΩ 1/16W J | |
| R1079 | NRSA6AJ-223W | MG RESISTOR | 22kΩ 1/16W J | |
| R1080 | NRSA6AJ-822W | MG RESISTOR | 8.2kΩ 1/16W J | |
| R1081 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R1082 | NRSA6AJ-123W | MG RESISTOR | 12kΩ 1/16W J | |
| R1083 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R1084 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R1085 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R1086 | NRSA6AJ-332W | MG RESISTOR | 3.3kΩ 1/16W J | |
| R1087 | NRSA6AJ-332W | MG RESISTOR | 3.3kΩ 1/16W J | |
| R1088 | NRSA6AJ-332W | MG RESISTOR | 3.3kΩ 1/16W J | |
| R1089 | NRSA6AJ-332W | MG RESISTOR | 3.3kΩ 1/16W J | |
| R1091 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R1092 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R1093 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R1094 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R1095 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R1096 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R1097 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R1099 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R2001 | NRSA6AJ-474W | MG RESISTOR | 470kΩ 1/16W J | |
| R2002 | NRSA6AJ-474W | MG RESISTOR | 470kΩ 1/16W J | |
| R2003 | NRSA6AJ-474W | MG RESISTOR | 470kΩ 1/16W J | |
| R2004 | NRSA6AJ-474W | MG RESISTOR | 470kΩ 1/16W J | |
| R2005 | NRSA6AJ-474W | MG RESISTOR | 470kΩ 1/16W J | |
| R2006 | NRSA6AJ-474W | MG RESISTOR | 470kΩ 1/16W J | |
| R2007 | NRSA6AJ-474W | MG RESISTOR | 470kΩ 1/16W J | |
| R2008 | NRSA6AJ-474W | MG RESISTOR | 470kΩ 1/16W J | |
| R2009 | NRSA6AJ-474W | MG RESISTOR | 470kΩ 1/16W J | |
| R2010 | NRSA6AJ-474W | MG RESISTOR | 470kΩ 1/16W J | |
| R2011 | NRSA6AJ-474W | MG RESISTOR | 470kΩ 1/16W J | |
| R2012 | NRSA6AJ-474W | MG RESISTOR | 470kΩ 1/16W J | |
| R2101 | NRSA6AJ-471W | MG RESISTOR | 470Ω 1/16W J | |
| R2102 | NRSA6AJ-471W | MG RESISTOR | 470Ω 1/16W J | |
| R2105 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R2111 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R2112 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R2113 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R2114 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R2201 | NRSA6AJ-684W | MG RESISTOR | 680kΩ 1/16W J | |
| R2202 | NRSA6AJ-564W | MG RESISTOR | 560kΩ 1/16W J | |
| R2203 | NRSA6AJ-393W | MG RESISTOR | 39kΩ 1/16W J | |
| R2204 | NRSA6AJ-154W | MG RESISTOR | 150kΩ 1/16W J | |
| R2206 | NRSA6AJ-333W | MG RESISTOR | 33kΩ 1/16W J | |
| R2207 | NRSA6AJ-333W | MG RESISTOR | 33kΩ 1/16W J | |
| R2208 | NRSA6AJ-223W | MG RESISTOR | 22kΩ 1/16W J | |
| R2209 | NRSA6AJ-223W | MG RESISTOR | 22kΩ 1/16W J | |
| R2210 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R2211 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R2212 | NRSA6AJ-2R7W | MG RESISTOR | 2.7Ω 1/16W J | |
| R2213 | NRSA6AJ-2R7W | MG RESISTOR | 2.7Ω 1/16W J | |
| R2217 | NRSA6AJ-100W | MG RESISTOR | 10Ω 1/16W J | |
| R2218 | NRSA6AJ-100W | MG RESISTOR | 10Ω 1/16W J | |
| R2219 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R2220 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R2221 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R2222 | NRSA6AJ-100W | MG RESISTOR | 10Ω 1/16W J | |
| R2223 | NRSA6AJ-100W | MG RESISTOR | 10Ω 1/16W J | |
| R2224 | NRSA6AJ-100W | MG RESISTOR | 10Ω 1/16W J | |
| R2225 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R2226 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R2229 | NRSA6AJ-564W | MG RESISTOR | 560kΩ 1/16W J | |
| R2230 | NRSA6AJ-564W | MG RESISTOR | 560kΩ 1/16W J | |
| R2231 | NRSA6AJ-332W | MG RESISTOR | 3.3kΩ 1/16W J | |
| R2401 | NRSA6AJ-472W | MG RESISTOR | 4.7kΩ 1/16W J | |
| R2402 | NRSA6AJ-472W | MG RESISTOR | 4.7kΩ 1/16W J | |
| R2403 | NRSA6AJ-183W | MG RESISTOR | 18kΩ 1/16W J | |
| R2406 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R2407 | NRSA6AJ-100W | MG RESISTOR | 10Ω 1/16W J | |
| R2601 | NRSA6AJ-182W | MG RESISTOR | 1.8kΩ 1/16W J | |
| R2602 | NRSA6AJ-182W | MG RESISTOR | 1.8kΩ 1/16W J | |
| R2607 | NRSA6AJ-222W | MG RESISTOR | 2.2kΩ 1/16W J | |
| R2608 | NRSA6AJ-222W | MG RESISTOR | 2.2kΩ 1/16W J | |
| R2609 | NRSA6AJ-223W | MG RESISTOR | 22kΩ 1/16W J | |
| R2610 | NRSA6AJ-223W | MG RESISTOR | 22kΩ 1/16W J | |
| R3002 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R3004 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R3005 | NRSA6AJ-100W | MG RESISTOR | 10Ω 1/16W J | |
| R3006 | NRSA6AJ-100W | MG RESISTOR | 10Ω 1/16W J | |
| R3007 | NRSA6AJ-562W | MG RESISTOR | 5.6kΩ 1/16W J | |
| R3008 | NRSA6AJ-222W | MG RESISTOR | 2.2kΩ 1/16W J | |
| R3009 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R3010 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R3011 | NRSA6AJ-224W | MG RESISTOR | 220kΩ 1/16W J | |
| R3013 | NRSA6AJ-242W | MG RESISTOR | 2.4kΩ 1/16W J | |
| R3014 | NRSA6AJ-392W | MG RESISTOR | 3.9kΩ 1/16W J | |
| R3015 | NRSA6AJ-392W | MG RESISTOR | 3.9kΩ 1/16W J | |
| R3016 | NRVA6AD-560W | CMF RESISTOR | 56Ω 1/16W D | |
| R3017 | NRVA6AD-560W | CMF RESISTOR | 56Ω 1/16W D | |
| R3018 | NRVA6AD-560W | CMF RESISTOR | 56Ω 1/16W D | |
| R3019 | NRVA6AD-560W | CMF RESISTOR | 56Ω 1/16W D | |
| R3020 | NRVA6AD-512W | CMF RESISTOR | 5.1kΩ 1/16W D | |
| R3021 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R3025 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R3027 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R3029 | NRSA6AJ-822W | MG RESISTOR | 8.2kΩ 1/16W J | |
| R3030 | NRSA6AJ-224W | MG RESISTOR | 220kΩ 1/16W J | |
| R3031 | NRSA6AJ-224W | MG RESISTOR | 220kΩ 1/16W J | |
| R3032 | NRSA6AJ-105W | MG RESISTOR | 1MΩ 1/16W J | |
| R3034 | NRSA6AJ-222W | MG RESISTOR | 2.2kΩ 1/16W J | |
| R3036 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R3037 | NRSA6AJ-681W | MG RESISTOR | 680Ω 1/16W J | |
| R3057 | NRSA6AJ-151W | MG RESISTOR | 150Ω 1/16W J | |
| R3066 | NRSA6AJ-561W | MG RESISTOR | 560Ω 1/16W J | |
| R3067 | NRSA6AJ-561W | MG RESISTOR | 560Ω 1/16W J | |
| R3068 | NRSA6AJ-181W | MG RESISTOR | 180Ω 1/16W J | |
| R3069 | NRSA6AJ-472W | MG RESISTOR | 4.7kΩ 1/16W J | |
| R3071 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R3074 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R3082 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R3701 | NRSA6AD-271W | MG RESISTOR | 270Ω 1/16W D | |
| R3702 | NRSA6AD-271W | MG RESISTOR | 270Ω 1/16W D | |
| R3703 | NRSA6AJ-332W | MG RESISTOR | 3.3kΩ 1/16W J | |
| R3704 | NRSA6AD-301W | MG RESISTOR | 300Ω 1/16W D | |
| R3705 | NRSA6AD-301W | MG RESISTOR | 300Ω 1/16W D | |
| R3706 | NRSA6AJ-332W | MG RESISTOR | 3.3kΩ 1/16W J | |
| R3707 | NRSA6AD-680W | MG RESISTOR | 68Ω 1/16W D | |
| R3708 | NRSA6AD-680W | MG RESISTOR | 68Ω 1/16W D | |
| R3709 | NRSA6AD-680W | MG RESISTOR | 68Ω 1/16W D | |
| R3710 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R3711 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R3712 | NRSA6AJ-105W | MG RESISTOR | 1MΩ 1/16W J | |
| R3713 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R3714 | NRSA6AJ-823W | MG RESISTOR | 82kΩ 1/16W J | |
| R3715 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R3722 | NRSA6AD-131W | MG RESISTOR | 130Ω 1/16W D | |
| R3724 | NRSA6AJ-472W | MG RESISTOR | 4.7kΩ 1/16W J | |

| MODEL | MARK | MODEL | MARK |
|---|---|---|---|
| GR-D70EK | A | GR-D70EY | C |
| GR-D70EX | B | GR-D70EZ | D |

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| R3725 | NRSA6AD-131W | MG RESISTOR | 130Ω 1/16W D | |
| R3726 | NRSA6AJ-472W | MG RESISTOR | 4.7kΩ 1/16W J | |
| R3727 | NRSA6AJ-472W | MG RESISTOR | 4.7kΩ 1/16W J | |
| R3728 | NRSA6AD-131W | MG RESISTOR | 130Ω 1/16W D | |
| R3730 | NRSA6AJ-472W | MG RESISTOR | 4.7kΩ 1/16W J | |
| R3731 | NRSA6AJ-472W | MG RESISTOR | 4.7kΩ 1/16W J | |
| R3732 | NRSA6AJ-101W | MG RESISTOR | 100Ω 1/16W J | |
| R3733 | NRSA6AD-561W | MG RESISTOR | 560Ω 1/16W D | |
| R3734 | NRSA6AJ-822W | MG RESISTOR | 8.2kΩ 1/16W J | |
| R3735 | NRSA6AD-182W | MG RESISTOR | 1.8kΩ 1/16W D | |
| R3736 | NRSA6AJ-183W | MG RESISTOR | 18kΩ 1/16W J | |
| R3737 | NRSA6AJ-183W | MG RESISTOR | 18kΩ 1/16W J | |
| R3738 | NRSA6AJ-681W | MG RESISTOR | 680Ω 1/16W J | |
| R3739 | NRSA6AJ-821W | MG RESISTOR | 820Ω 1/16W J | |
| R3740 | NRSA6AJ-821W | MG RESISTOR | 820Ω 1/16W J | |
| R3741 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R3742 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R3743 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R3744 | NRSA6AD-561W | MG RESISTOR | 560Ω 1/16W D | |
| R3745 | NRSA6AD-152W | MG RESISTOR | 1.5kΩ 1/16W D | |
| R3746 | NRSA6AJ-222W | MG RESISTOR | 2.2kΩ 1/16W J | |
| R3747 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R3748 | NRSA6AJ-474W | MG RESISTOR | 470kΩ 1/16W J | |
| R3801 | NRSA6AJ-101W | MG RESISTOR | 100Ω 1/16W J | |
| R3802 | NRSA6AD-821W | MG RESISTOR | 820Ω 1/16W D | |
| R3803 | NRSA6AD-273W | MG RESISTOR | 27kΩ 1/16W D | |
| R3804 | NRSA6AD-153W | MG RESISTOR | 15kΩ 1/16W D | |
| R3805 | NRSA6AD-821W | MG RESISTOR | 820Ω 1/16W D | |
| R3807 | NRSA6AJ-220W | MG RESISTOR | 22Ω 1/16W J | |
| R4201 | NRSA6AJ-333W | MG RESISTOR | 33kΩ 1/16W J | |
| R4202 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4203 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4204 | NRSA6AJ-220W | MG RESISTOR | 22Ω 1/16W J | |
| R4205 | NRSA6AJ-220W | MG RESISTOR | 22Ω 1/16W J | |
| R4301 | NRSA6AJ-220W | MG RESISTOR | 22Ω 1/16W J | |
| R4303 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4304 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4306 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4307 | NRSA6AJ-470W | MG RESISTOR | 47Ω 1/16W J | |
| R4308 | NRSA6AJ-470W | MG RESISTOR | 47Ω 1/16W J | |
| R4309 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4310 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4315 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4317 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4319 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4321 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4326 | NRSA6AJ-470W | MG RESISTOR | 47Ω 1/16W J | |
| R4327 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4328 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4329 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4330 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4331 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4332 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4333 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4334 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4335 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4336 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4337 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4338 | NRSA6AJ-220W | MG RESISTOR | 22Ω 1/16W J | |
| R4339 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4341 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4342 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4343 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4344 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4345 | NRSA6AJ-220W | MG RESISTOR | 22Ω 1/16W J | |
| R4346 | NRSA6AJ-220W | MG RESISTOR | 22Ω 1/16W J | |
| R4348 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4349 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4350 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4351 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4352 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4353 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4354 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4355 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4356 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4804 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R4805 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R4806 | NRSA6AJ-683W | MG RESISTOR | 68kΩ 1/16W J | |
| R4807 | NRSA6AJ-823W | MG RESISTOR | 82kΩ 1/16W J | |
| R4808 | NRSA6AJ-243W | MG RESISTOR | 24kΩ 1/16W J | |
| R4809 | NRSA6AJ-681W | MG RESISTOR | 680Ω 1/16W J | |
| R4810 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R4811 | NRSA6AJ-824W | MG RESISTOR | 820kΩ 1/16W J | |
| R4812 | NRSA6AJ-153W | MG RESISTOR | 15kΩ 1/16W J | |
| R4814 | NRSA6AJ-105W | MG RESISTOR | 1MΩ 1/16W J | |
| R4815 | NRSA6AJ-472W | MG RESISTOR | 4.7kΩ 1/16W J | |
| R4816 | NRSA6AJ-105W | MG RESISTOR | 1MΩ 1/16W J | |
| R4817 | NRSA6AJ-334W | MG RESISTOR | 330kΩ 1/16W J | |
| R4818 | NRSA6AJ-154W | MG RESISTOR | 150kΩ 1/16W J | |
| R4819 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R4820 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R4821 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R4822 | NRSA6AJ-333W | MG RESISTOR | 33kΩ 1/16W J | |
| R4823 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R4824 | NRSA6AJ-472W | MG RESISTOR | 4.7kΩ 1/16W J | |
| R4825 | NRSA6AJ-222W | MG RESISTOR | 2.2kΩ 1/16W J | |
| R4826 | NRSA6AJ-473W | MG RESISTOR | 47kΩ 1/16W J | |
| R4827 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4828 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4833 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R4836 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R4837 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4839 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4840 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4843 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4844 | NRSA6AJ-151W | MG RESISTOR | 150Ω 1/16W J | |
| R4846 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4849 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4854 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4856 | NRSA6AJ-6R8W | MG RESISTOR | 6.8Ω 1/16W J | |
| R4857 | NRSA6AJ-6R8W | MG RESISTOR | 6.8Ω 1/16W J | |
| R4858 | NRSA6AJ-333W | MG RESISTOR | 33kΩ 1/16W J | |
| R4859 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4860 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4862 | NRSA6AJ-6R8W | MG RESISTOR | 6.8Ω 1/16W J | |
| R4863 | NRSA6AJ-6R8W | MG RESISTOR | 6.8Ω 1/16W J | |
| R4864 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R4865 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R4866 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R4867 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R4868 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4870 | NRSA6AJ-271W | MG RESISTOR | 270Ω 1/16W J | |
| R4871 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4874 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R4875 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R5501 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R5503 | NRSA6AJ-220W | MG RESISTOR | 22Ω 1/16W J | |
| R5504 | NRSA6AJ-220W | MG RESISTOR | 22Ω 1/16W J | |
| R5505 | NRSA6AJ-220W | MG RESISTOR | 22Ω 1/16W J | |
| R5506 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R5507 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R5509 | NRSA6AJ-470W | MG RESISTOR | 47Ω 1/16W J | |
| R5511 | NRSA6AJ-470W | MG RESISTOR | 47Ω 1/16W J | |
| R5512 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R5513 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R5514 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R6021 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R6022 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R6023 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R6024 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R6025 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R6026 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R6027 | NRSA6AD-103W | MG RESISTOR | 10kΩ 1/16W D | |
| R6028 | NRSA6AD-751W | MG RESISTOR | 750Ω 1/16W D | |
| R6029 | NRSA6AD-103W | MG RESISTOR | 10kΩ 1/16W D | |
| R6030 | NRSA6AJ-333W | MG RESISTOR | 33kΩ 1/16W J | |
| R6031 | NRSA6AJ-472W | MG RESISTOR | 4.7kΩ 1/16W J | |
| R6033 | NRSA6AJ-562W | MG RESISTOR | 5.6kΩ 1/16W J | |
| R6034 | NRSA6AJ-153W | MG RESISTOR | 15kΩ 1/16W J | |
| R6035 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R6036 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R6037 | NRSA6AD-153W | MG RESISTOR | 15kΩ 1/16W D | |
| R6038 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R6039 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R6040 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R6042 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |

| MODEL | MARK | MODEL | MARK |
|---|---|---|---|
| GR-D70EK | A | GR-D70EY | C |
| GR-D70EX | B | GR-D70EZ | D |

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| R6044 | NRSA6AJ-224W | MG RESISTOR | 220kΩ 1/16W J | |
| R6102 | NRVA6AD-223W | CMF RESISTOR | 22kΩ 1/16W D | |
| R6103 | NRVA6AD-103W | CMF RESISTOR | 10kΩ 1/16W D | |
| R6104 | NRSA6AJ-474W | MG RESISTOR | 470kΩ 1/16W J | |
| R6105 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R6106 | NRSA6AJ-332W | MG RESISTOR | 3.3kΩ 1/16W J | |
| R6107 | NRSA6AD-183W | MG RESISTOR | 18kΩ 1/16W D | |
| R6108 | NRSA6AD-123W | MG RESISTOR | 12kΩ 1/16W D | |
| R6109 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R6202 | NRSA6AD-123W | MG RESISTOR | 12kΩ 1/16W D | |
| R6203 | NRSA6AD-153W | MG RESISTOR | 15kΩ 1/16W D | |
| R6302 | NRSA6AD-183W | MG RESISTOR | 18kΩ 1/16W D | |
| R6303 | NRSA6AD-472W | MG RESISTOR | 4.7kΩ 1/16W D | |
| R6305 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R6306 | NRSA6AJ-123W | MG RESISTOR | 12kΩ 1/16W J | |
| R6308 | NRSA6AJ-473W | MG RESISTOR | 47kΩ 1/16W J | |
| R6309 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R6402 | NRSA6AD-243W | MG RESISTOR | 24kΩ 1/16W D | |
| R6403 | NRSA6AD-302W | MG RESISTOR | 3kΩ 1/16W D | |
| R6405 | NRSA6AJ-123W | MG RESISTOR | 12kΩ 1/16W J | |
| R6406 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R6407 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R6502 | NRSA6AD-473W | MG RESISTOR | 47kΩ 1/16W D | |
| R6503 | NRSA6AD-562W | MG RESISTOR | 5.6kΩ 1/16W D | |
| R6505 | NRSA6AJ-473W | MG RESISTOR | 47kΩ 1/16W J | |
| R6506 | NRSA6AJ-273W | MG RESISTOR | 27kΩ 1/16W J | |
| R6602 | NRSA6AD-114W | MG RESISTOR | 110kΩ 1/16W D | |
| R6603 | NRSA6AD-392W | MG RESISTOR | 3.9kΩ 1/16W D | |
| R6604 | NRSA6AD-114W | MG RESISTOR | 110kΩ 1/16W D | |
| R6605 | NRSA6AJ-222W | MG RESISTOR | 2.2kΩ 1/16W J | |
| R6606 | NRSA6AD-104W | MG RESISTOR | 100kΩ 1/16W D | |
| R6607 | NRSA6AD-473W | MG RESISTOR | 47kΩ 1/16W D | |
| R6608 | NRSA6AJ-273W | MG RESISTOR | 27kΩ 1/16W J | |
| R6609 | NRSA6AJ-822W | MG RESISTOR | 8.2kΩ 1/16W J | |
| R6610 | NRSA6AD-473W | MG RESISTOR | 47kΩ 1/16W D | |
| R6611 | NRSA6AD-683W | MG RESISTOR | 68kΩ 1/16W D | |
| R6612 | NRSA6AJ-104W | MG RESISTOR | 100kΩ 1/16W J | |
| R6613 | NRSA6AJ-823W | MG RESISTOR | 82kΩ 1/16W J | |
| R6614 | NRSA6AD-104W | MG RESISTOR | 100kΩ 1/16W D | |
| R6615 | NRSA6AD-104W | MG RESISTOR | 100kΩ 1/16W D | |
| R6616 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R6617 | NRSA6AJ-333W | MG RESISTOR | 33kΩ 1/16W J | |
| R6618 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R6619 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R6701 | NRZ0058-R20X | MG RESISTOR | 0.2Ω 1/2W J | |
| R6702 | NRSA6AD-114W | MG RESISTOR | 110kΩ 1/16W D | |
| R6703 | NRSA6AD-153W | MG RESISTOR | 15kΩ 1/16W D | |
| R6704 | NRSA6AJ-224W | MG RESISTOR | 220kΩ 1/16W J | |
| R6706 | NRSA6AD-823W | MG RESISTOR | 82kΩ 1/16W D | |
| R6707 | NRSA6AD-333W | MG RESISTOR | 33kΩ 1/16W D | |
| R6801 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R6803 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R6804 | NRVA6AD-563W | CMF RESISTOR | 56kΩ 1/16W D | |
| ⚠ R6805 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R6813 | NRVA6AD-273W | CMF RESISTOR | 27kΩ 1/16W D | |
| R6815 | NRSA6AJ-681W | MG RESISTOR | 680Ω 1/16W J | |
| R8001 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R8002 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R8003 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R8004 | NQL402M-100X | COIL | 10uH M | |
| R8005 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R8006 | NRSA6AJ-153W | MG RESISTOR | 15kΩ 1/16W J | |
| R8007 | NRSA6AJ-472W | MG RESISTOR | 4.7kΩ 1/16W J | |
| R8009 | NRSA6AJ-472W | MG RESISTOR | 4.7kΩ 1/16W J | |
| R8016 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R8017 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R8022 | NRSA6AJ-105W | MG RESISTOR | 1MΩ 1/16W J | |
| R8025 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R8026 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R8030 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R8031 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R8032 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R8037 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R8038 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R8043 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R8046 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R8051 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R8054 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R8055 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R8056 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R8058 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R8059 | NRSA6AJ-473W | MG RESISTOR | 47kΩ 1/16W J | |
| R8063 | NRSA6AJ-220W | MG RESISTOR | 22Ω 1/16W J | |
| R8065 | NRSA6AJ-101W | MG RESISTOR | 100Ω 1/16W J | |
| R8066 | NRSA6AJ-473W | MG RESISTOR | 47kΩ 1/16W J | |
| R8067 | NDCA1HJ-100W | C CAPACITOR | 10pF 50V J | |
| R8068 | NRSA6AJ-561W | MG RESISTOR | 560Ω 1/16W J | |
| R8070 | NRSA6AJ-220W | MG RESISTOR | 22Ω 1/16W J | |
| R8074 | NRSA6AJ-473W | MG RESISTOR | 47kΩ 1/16W J | |
| R8075 | NRSA6AJ-102W | MG RESISTOR | 1kΩ 1/16W J | |
| R8302 | NRS181J-220X | MG RESISTOR | 22Ω 1/8W J | |
| R8303 | NRS181J-220X | MG RESISTOR | 22Ω 1/8W J | |
| R8305 | NRSA6AJ-105W | MG RESISTOR | 1MΩ 1/16W J | |
| R8306 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R8307 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R8308 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R8309 | NRSA6AJ-103W | MG RESISTOR | 10kΩ 1/16W J | |
| R8311 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R8312 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R8716 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| R8717 | NRSA6AJ-0R0W | MG RESISTOR | 0Ω 1/16W J | |
| RA1001 | NRZ0034-473W | NET RESISTOR | 47kΩ 1/32W J | |
| RA1002 | NRZ0034-104W | NET RESISTOR | 100kΩ 1/32W J | |
| RA1004 | NRZ0034-104W | NET RESISTOR | 100kΩ 1/32W J | |
| RA1005 | NRZ0034-103W | NET RESISTOR | 10kΩ 1/32W J | |
| RA1006 | NRZ0034-102W | NET RESISTOR | 1kΩ 1/32W J | |
| RA1007 | NRZ0034-102W | NET RESISTOR | 1kΩ 1/32W J | |
| RA1008 | NRZ0034-104W | NET RESISTOR | 100kΩ 1/32W J | |
| RA3001 | NRZ0034-560W | NET RESISTOR | 56Ω 1/32W J | |
| RA3002 | NRZ0034-560W | NET RESISTOR | 56Ω 1/32W J | |
| RA3003 | NRZ0034-100W | NET RESISTOR | 10Ω 1/32W J | |
| RA3004 | NRZ0034-103W | NET RESISTOR | 10kΩ 1/32W J | |
| RA3005 | NRZ0040-0R0X | NET RESISTOR | 0Ω 1/16W J | |
| RA8001 | NRZ0034-101W | NET RESISTOR | 100Ω 1/32W J | |
| RA8002 | NRZ0034-101W | NET RESISTOR | 100Ω 1/32W J | |
| RA8003 | NRZ0034-101W | NET RESISTOR | 100Ω 1/32W J | |
| RA8004 | NRZ0034-101W | NET RESISTOR | 100Ω 1/32W J | |
| L1001 | NQL402M-100X | COIL | 10uH M | |
| L1002 | NQL402M-100X | COIL | 10uH M | |
| L2101 | NQL315K-100X | COIL | 10uH K | |
| L2401 | NQL402M-100X | COIL | 10uH M | |
| L2402 | NQL402M-100X | COIL | 10uH M | |
| L2604 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| L3001 | NQR0129-002X | FERRITE BEADS | | |
| L3002 | NQR0129-002X | FERRITE BEADS | | |
| L3004 | NQR0006-001X | FERRITE BEADS | | |
| L3005 | NQR0006-001X | FERRITE BEADS | | |
| L3007 | NQL085J-2R2X | COIL | 2.2uH J | |
| L3008 | NQL085J-120X | COIL | 12uH J | |
| L3012 | NQR0129-002X | FERRITE BEADS | | |
| L3014 | NQL38DK-100X | P COIL | 10uH K | |
| L3015 | NQR0006-001X | FERRITE BEADS | | |
| L3701 | NQL38DK-100X | P COIL | 10uH K | |
| L3731 | NQL085J-6R8X | COIL | 6.8uH J | |
| L3732 | NQL085J-6R8X | COIL | 6.8uH J | |
| L3801 | NQR0129-002X | FERRITE BEADS | | |
| L3802 | NQR0129-002X | FERRITE BEADS | | |
| L3803 | NQR0006-001X | FERRITE BEADS | | |
| L3804 | NQL38DK-100X | P COIL | 10uH K | |
| L4201 | NQR0129-002X | FERRITE BEADS | | |
| L4301 | NQR0129-002X | FERRITE BEADS | | |
| L4302 | NQR0129-002X | FERRITE BEADS | | |
| L4802 | NQL302N-100X | COIL | 10uH N | |
| L4851 | NQR0129-002X | FERRITE BEADS | | |
| L4852 | NQL315K-100X | COIL | 10uH K | |
| L4853 | NQL315K-100X | COIL | 10uH K | |
| L5501 | NQL315K-100X | COIL | 10uH K | |
| L5502 | NQR0129-002X | FERRITE BEADS | | |
| L5503 | NQR0129-002X | FERRITE BEADS | | |
| L5504 | NQR0129-002X | FERRITE BEADS | | |
| L5505 | NQL315K-100X | COIL | 10uH K | |
| L5506 | NQL315K-100X | COIL | 10uH K | |
| L6001 | NQLZ011-4R7X | COIL | 4.7uH N | |
| L6002 | NQLZ011-4R7X | COIL | 4.7uH N | |
| L6101 | NQL52EM-390X | COIL | 39uH M | |

| MODEL | MARK | MODEL | MARK |
|---|---|---|---|
| GR-D70EK | A | GR-D70EY | C |
| GR-D70EX | B | GR-D70EZ | D |

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| L6201 | NQL52EM-390X | COIL | 39uH M | |
| L6301 | NQL52EM-390X | COIL | 39uH M | |
| L6302 | NQL144K-220X | P COIL | 22uH K | |
| L6401 | NQL52EM-470X | COIL | 47uH M | |
| L6501 | NQL52EM-470X | COIL | 47uH M | |
| L6601 | NQL52EM-221X | COIL | 220uH M | |
| L6701 | NQL73EM-100X | COIL | 10uH M | |
| L6801 | NQL034K-470X | P COIL | 47uH K | |
| L8001 | NQR0129-002X | FERRITE BEADS | | |
| L8002 | NQR0129-002X | FERRITE BEADS | | |
| L8003 | NQR0129-002X | FERRITE BEADS | | |
| L8004 | NQR0129-002X | FERRITE BEADS | | |
| L8005 | NQR0129-002X | FERRITE BEADS | | |
| L8006 | NQR0129-002X | FERRITE BEADS | | |
| L8301 | NQR0129-002X | FERRITE BEADS | | |
| CN101 | QGF0528F1-40X | CONNECTOR | FFC/FPC (1-40) | |
| CN102 | QGF0505F1-22X | CONNECTOR | FFC/FPC (1-22) | |
| CN103 | QGF0507F3-10X | CONNECTOR | FFC/FPC (1-10) | |
| CN104 | QGA1002C1-11X | CONNECTOR | W-B (1-11) | |
| CN105 | QGB0509M1-30X | CONNECTOR | B-B (1-30) | |
| CN106 | QGA1201C2-05X | CONNECTOR | W-B (1-5) | |
| CN107 | QGF0503C1-20X | CONNECTOR | FFC/FPC (1-20) | |
| CN108 | QGF0503C1-24V | CONNECTOR | FFC/FPC (1-24) | |
| CN109 | QGF0503F1-16X | CONNECTOR | FFC/FPC (1-16) | |
| CN110 | QGF0528F1-40X | CONNECTOR | FFC/FPC (1-40) | |
| CN111 | QGF0528F1-40X | CONNECTOR | FFC/FPC (1-40) | |
| ⚠ F6001 | NMFZ007-2R0X-K | FUSE | 2A 32V | |
| ⚠ F6301 | NMFZ007-1R25X-K | FUSE | 1.25A 32V | |
| ⚠ F6701 | NMFZ007-1R25X-K | FUSE | 1.25A 32V | |
| ⚠ F6801 | NMFZ007-R50X-K | FUSE | 0.5A 50V | |
| J501 | NNZ0041-001X | D CONNECTOR | IEEE1394(4pin) | |
| J502 | QNZ0616-001 | USB CONNECTOR | | |
| X1001 | NAX0578-001X | CRYSTAL | | |
| X1002 | NAX0564-001X | CRYSTAL | | |
| X3002 | NAX0480-001X | CRYSTAL | 24.576MHz | |
| X5501 | NAX0587-001X | CXO | | |
| X8301 | NAX0522-001X | C RESONATOR | 6.000MHz | |
| OT1 | LY30030-071A | SPACER(A) | | |
| OT2 | LY44158-001A | SHEET(SHIELD) | | |
| WR1 | QAL0474-001 | FPC | MAIN-PREMDA CN401 | |
| WR2 | QAL0474-001 | FPC | MAIN-PREMDA CN408 | |

## MONI-BW BOARD ASSEMBLY <02>

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| PW1 | YB10433F-01 | MONI-BW BOARD ASSY | | |
| IC7601 | AN12550A | IC | | |
| IC7602 | BA4558F-X | IC | | |
| Q7601 | 2SC4617/QR/-X | TRANSISTOR | | |
| Q7601 or | 2SC4738/YG/-X | TRANSISTOR | | |
| Q7601 or | 2SD2216J/QR/-X | TRANSISTOR | | |
| Q7601 or | BC847BT-X | TRANSISTOR | | |
| Q7602 | 2SA1774/QR/-X | TRANSISTOR | | |
| Q7602 or | 2SA1832/YG/-X | TRANSISTOR | | |
| Q7602 or | BC857BT-X | TRANSISTOR | | |
| Q7603 | 2SC4617/QR/-X | TRANSISTOR | | |
| Q7603 or | 2SC4738/YG/-X | TRANSISTOR | | |
| Q7603 or | 2SD2216J/QR/-X | TRANSISTOR | | |
| Q7603 or | BC847BT-X | TRANSISTOR | | |
| Q7604 | 2SA1774/QR/-X | TRANSISTOR | | |
| Q7604 or | 2SA1832/YG/-X | TRANSISTOR | | |
| Q7604 or | BC857BT-X | TRANSISTOR | | |
| Q7608 | DTC144EE-X | DIGI TRANSISTOR | | |
| Q7608 or | UN9213J-X | DIGI TRANSISTOR | | |
| Q7608 or | RN1104-X | DIGI TRANSISTOR | | |
| Q7608 or | BCR148T-X | DIGI TRANSISTOR | | |
| Q7609 | 2SC4617/QR/-X | TRANSISTOR | | |
| Q7609 or | 2SC4738/YG/-X | TRANSISTOR | | |
| Q7609 or | 2SD2216J/QR/-X | TRANSISTOR | | |
| Q7609 or | BC847BT-X | TRANSISTOR | | |
| Q7610 | DTA114EE-X | DIGI TRANSISTOR | | |
| Q7610 or | BCR183T-X | DIGI TRANSISTOR | | |
| Q7611 | DTC144EE-X | DIGI TRANSISTOR | | |
| Q7611 or | UN9213J-X | DIGI TRANSISTOR | | |
| Q7611 or | RN1104-X | DIGI TRANSISTOR | | |
| Q7611 or | BCR148T-X | DIGI TRANSISTOR | | |
| Q7612 | DTA144EE-X | DIGI TRANSISTOR | | |
| Q7612 or | UN9113J-X | DIGI TRANSISTOR | | |
| Q7612 or | RN2104-X | DIGI TRANSISTOR | | |
| Q7612 or | BCR198T-X | DIGI TRANSISTOR | | |
| Q7613 | 2SD2654/VW/-X | TRANSISTOR | | |
| D11 | RSA6.1J4-W | SI DIODE | | |
| D7602 | 1SS355-X | SI DIODE | | |
| C1 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C10 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C11 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C7601 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C7602 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C7603 | NCB11CK-225X | C CAPACITOR | 2.2uF 16V K | |
| C7604 | NCB11CK-225X | C CAPACITOR | 2.2uF 16V K | |
| C7605 | NCB11CK-225X | C CAPACITOR | 2.2uF 16V K | |
| C7606 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C7607 | NCB41CK-106X | C CAPACITOR | 10uF 16V K | |
| C7608 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C7609 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C7613 | NCB11CK-225X | C CAPACITOR | 2.2uF 16V K | |
| C7614 | NCB31HK-152X | C CAPACITOR | 1500pF 50V K | |
| C7615 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C7616 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C7617 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C7618 | NCB10JK-106X | C CAPACITOR | 10uF 6.3V K | |
| C7619 | NCB10JK-106X | C CAPACITOR | 10uF 6.3V K | |
| C7620 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C7621 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C7622 | NCB21CK-105X | C CAPACITOR | 1uF 16V K | |
| C7623 | NBE21AM-106X | TA E CAPACITOR | 10uF 10V M | |
| C7624 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C7626 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C7627 | NCF31CZ-104X | C CAPACITOR | 0.1uF 16V Z | |
| C7628 | NBP41EM-475X | TA E CAPACITOR | 4.7uF 25V M | |
| C7629 | NBP21CM-335X | TA E CAPACITOR | 3.3uF 16V M | |
| C7630 | NBP41EM-475X | TA E CAPACITOR | 4.7uF 25V M | |
| C7631 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C7632 | NBP41EM-475X | TA E CAPACITOR | 4.7uF 25V M | |
| C7633 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C7634 | NCB11CK-225X | C CAPACITOR | 2.2uF 16V K | |
| C7635 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C7637 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C7646 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C7647 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C7651 | NCB11CK-225X | C CAPACITOR | 2.2uF 16V K | |
| C7661 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C7662 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C7663 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C7664 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C7665 | NBP41CM-226X | TA E CAPACITOR | 22uF 16V M | |
| C7666 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| R3 | NRSA63J-103X | MG RESISTOR | 10kΩ 1/16W J | |
| R4 | NRSA63J-332X | MG RESISTOR | 3.3kΩ 1/16W J | |
| R5 | NRSA63J-682X | MG RESISTOR | 6.8kΩ 1/16W J | |
| R6 | NRSA63J-223X | MG RESISTOR | 22kΩ 1/16W J | |
| R7 | NRSA63J-103X | MG RESISTOR | 10kΩ 1/16W J | |
| R8 | NRSA63J-332X | MG RESISTOR | 3.3kΩ 1/16W J | |
| R18 | NRSA63J-473X | MG RESISTOR | 47kΩ 1/16W J | |
| R19 | NRSA63J-103X | MG RESISTOR | 10kΩ 1/16W J | |
| R21 | NRSA63J-103X | MG RESISTOR | 10kΩ 1/16W J | |
| R22 | NRSA63J-473X | MG RESISTOR | 47kΩ 1/16W J | |
| R23 | NRSA63J-104X | MG RESISTOR | 100kΩ 1/16W J | |
| R25 | NRSA63J-473X | MG RESISTOR | 47kΩ 1/16W J | |
| R29 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R30 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R31 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R32 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R7601 | NRVA63D-622X | CMF RESISTOR | 6.2kΩ 1/16W D | |
| R7602 | NRSA63J-153X | MG RESISTOR | 15kΩ 1/16W J | |
| R7603 | NRSA63J-683X | MG RESISTOR | 68kΩ 1/16W J | |

| MODEL | MARK | MODEL | MARK |
|---|---|---|---|
| GR-D70EK | A | GR-D70EY | C |
| GR-D70EX | B | GR-D70EZ | D |

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| R7608 | NRSA63J-153X | MG RESISTOR | 15kΩ 1/16W J | |
| R7609 | NRVA63D-223X | CMF RESISTOR | 22kΩ 1/16W D | |
| R7610 | NRVA63D-433X | CMF RESISTOR | 43kΩ 1/16W D | |
| R7611 | NRVA63D-821X | CMF RESISTOR | 820Ω 1/16W D | |
| R7612 | NRVA63D-223X | CMF RESISTOR | 22kΩ 1/16W D | |
| R7613 | NRVA63D-223X | CMF RESISTOR | 22kΩ 1/16W D | |
| R7614 | NRVA63D-223X | CMF RESISTOR | 22kΩ 1/16W D | |
| R7615 | NRSA63J-223X | MG RESISTOR | 22kΩ 1/16W J | |
| R7616 | NRSA63J-223X | MG RESISTOR | 22kΩ 1/16W J | |
| R7617 | NRSA02J-561X | MG RESISTOR | 560Ω 1/10W J | |
| R7618 | NRSA02J-561X | MG RESISTOR | 560Ω 1/10W J | |
| R7620 | NRSA63J-335X | MG RESISTOR | 3.3MΩ 1/16W J | |
| R7621 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R7630 | NRSA63J-223X | MG RESISTOR | 22kΩ 1/16W J | |
| R7634 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R7636 | NRSA63J-101X | MG RESISTOR | 100Ω 1/16W J | |
| R7637 | NRSA63J-101X | MG RESISTOR | 100Ω 1/16W J | |
| R7638 | NRSA63J-101X | MG RESISTOR | 100Ω 1/16W J | |
| R7661 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R7662 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R7663 | NRSA63J-103X | MG RESISTOR | 10kΩ 1/16W J | |
| R7666 | NRSA63J-153X | MG RESISTOR | 15kΩ 1/16W J | |
| R7667 | NRVA63D-273X | CMF RESISTOR | 27kΩ 1/16W D | |
| R7668 | NRVA63D-273X | CMF RESISTOR | 27kΩ 1/16W D | |
| R7669 | NRVA63D-392X | CMF RESISTOR | 3.9kΩ 1/16W D | |
| R7672 | NRSA63D-394X | MG RESISTOR | 390kΩ 1/16W D | |
| R7673 | NRVA63D-473X | CMF RESISTOR | 47kΩ 1/16W D | |
| R7674 | NRVA63D-473X | CMF RESISTOR | 47kΩ 1/16W D | |
| R7675 | NRSA63J-274X | MG RESISTOR | 270kΩ 1/16W J | |
| L10 | NQR0129-002X | FERRITE BEADS | | |
| L7601 | NQL365K-100X | COIL | 10uH K | |
| L7602 | NQL365K-470X | COIL | 47uH K | |
| L7603 | NQL365K-470X | COIL | 47uH K | |
| L7604 | NQL365K-100X | COIL | 10uH K | |
| L7605 | NQL365K-100X | COIL | 10uH K | |
| L7607 | NQL365K-100X | COIL | 10uH K | |
| CN761 | QGF0508F1-40X | CONNECTOR | FFC/FPC (1-40) | |
| CN762 | QGF0508F1-10X | CONNECTOR | FFC/FPC (1-10) | |
| CN763 | QGF0507F3-20X | CONNECTOR | FFC/FPC (1-20) | |
| CN765 | QGF0506F2-32X | CONNECTOR | FFC/FPC (1-32) | |
| CN766 | NNZ0058-001X | SD CARD CONNECTOR | | |
| SW2 | NSW0145-001X | TACT SWITCH STOP | | |
| SW3 | NSW0145-001X | TACT SWITCH REW | | |
| SW4 | NSW0145-001X | TACT SWITCH FF | | |
| SW5 | NSW0145-001X | TACT SWITCH PLAY/PAUSE | | |
| SW6 | NSW0099-001X | SLIDE SWITCH DSC/VIDEO | | |
| SW7 | NSW0145-001X | TACT SWITCH INDEX | | |
| SW8 | NSW0145-001X | TACT SWITCH SELECT | | |
| SW7601 | NSW0200-001X | LEVER SWITCH MONI SW | | |
| OT1 | LY44158-001A | SHEET(SHIELD) | | |

## BL-2.5 BOARD ASSEMBLY <03>

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| PW1 | YB20938A | BL-2.5 BOARD ASSY | | |
| IC7604 | DN8797MS-X | IC | | |
| Q7501 | 2SD1664/QR/-W | TRANSISTOR | | |
| Q7502 | 2SD1664/QR/-W | TRANSISTOR | | |
| Q7503 | DTA144EE-X | DIGI TRANSISTOR | | |
| Q7503 or | UN9113J-X | DIGI TRANSISTOR | | |
| Q7503 or | RN2104-X | DIGI TRANSISTOR | | |
| Q7503 or | BCR198T-X | DIGI TRANSISTOR | | |
| Q7504 | DTC144EE-X | DIGI TRANSISTOR | | |
| Q7504 or | UN9213J-X | DIGI TRANSISTOR | | |
| Q7504 or | RN1104-X | DIGI TRANSISTOR | | |
| Q7504 or | BCR148T-X | DIGI TRANSISTOR | | |
| C7501 | NCZ1016-120X | C CAPACITOR | 12pF 2kV J | |
| C7502 | NCB21EK-273X | C CAPACITOR | 0.027uF 25V K | |
| C7503 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C7504 | NCB10JK-106X | C CAPACITOR | 10uF 6.3V K | |
| R7501 | NRSA63J-102X | MG RESISTOR | 1kΩ 1/16W J | |
| R7502 | NRSA63J-102X | MG RESISTOR | 1kΩ 1/16W J | |
| R7503 | NRSA63J-102X | MG RESISTOR | 1kΩ 1/16W J | |
| R7504 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R7511 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R7512 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R7513 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| L7501 | NQLZ010-680X | COIL | 68uH M | |
| ⚠ T7501 | NQS0056-001X | SW TARNSF | | |
| CN7601 | QGF0507F3-16X | CONNECTOR | FFC/FPC (1-16) | |
| CN7602 | QGF0507F3-16X | CONNECTOR | FFC/FPC (1-16) | |
| CN7603 | QGF0508F1-24X | CONNECTOR | FFC/FPC (1-24) | |
| ⚠ F7501 | NMFZ007-R40X-K | FUSE | 0.4A 50V | |
| WR1 | QAL0464-001 | FPC | | |

## CCD BOARD ASSEMBLY <04>

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| PW1 | YB10406A-01-SS | CCD BOARD ASSY | | |
| Q5001 | 2SC3931/CD/-X | TRANSISTOR | | |
| Q5002 | 2SC4081/QR/-X | TRANSISTOR | | |
| Q5002 or | BC847BW-X | TRANSISTOR | | |
| C5001 | NBP41EM-475X | TA E CAPACITOR | 4.7uF 25V M | |
| C5002 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C5003 | NBE21AM-106X | TA E CAPACITOR | 10uF 10V M | |
| C5004 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C5005 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C5006 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C5007 | NCB31EK-222X | C CAPACITOR | 2200pF 25V K | |
| R5001 | NRSA63J-472X | MG RESISTOR | 4.7kΩ 1/16W J | |
| R5002 | NRSA63J-104X | MG RESISTOR | 100kΩ 1/16W J | |
| R5005 | NRS181J-472X | MG RESISTOR | 4.7kΩ 1/8W J | |
| L5001 | NQL144K-100X | P COIL | 10uH K | |
| L5002 | NQL315K-100X | COIL | 10uH K | |

## PREMDA BOARD ASSEMBLY <05>

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| PW1 | YB10405A-01 | PREMDA BOARD ASSY | | |
| IC1601 | BD6637KS | IC | | |
| IC1701 | LM358DMR2-X | IC | | |
| IC1702 | LM393DMR2-X | IC | | |
| IC3501 | JCY0132 | IC | | |
| IC3502 | SN74AHC1G04K-X | IC | | |
| Q1601 | UMC3N-W | DIGI TRANSISTOR | | |
| D1602 | DAP222-X | DIODE ARRAY | | |
| D1602 or | MA132WA-X | SI DIODE | | |
| D1603 | DAP222-X | DIODE ARRAY | | |
| D1603 or | MA132WA-X | SI DIODE | | |
| D1604 | DAP222-X | DIODE ARRAY | | |
| D1604 or | MA132WA-X | SI DIODE | | |
| C1601 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C1602 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C1603 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C1605 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C1606 | NCB31HK-152X | C CAPACITOR | 1500pF 50V K | |
| C1607 | NCB31CK-473X | C CAPACITOR | 0.047uF 16V K | |

| MODEL | MARK | MODEL | MARK |
|---|---|---|---|
| GR-D70EK | A | GR-D70EY | C |
| GR-D70EX | B | GR-D70EZ | D |

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| C1614 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C1618 | NCB31HK-222X | C CAPACITOR | 2200pF 50V K | |
| C1619 | NCB31HK-222X | C CAPACITOR | 2200pF 50V K | |
| C1620 | NCB31HK-222X | C CAPACITOR | 2200pF 50V K | |
| C1621 | NCB30JK-105X | C CAPACITOR | 1uF 6.3V K | |
| C1622 | NCB31CK-223X | C CAPACITOR | 0.022uF 16V K | |
| C1623 | NCB31CK-473X | C CAPACITOR | 0.047uF 16V K | |
| C1624 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C1625 | NCS31HJ-101X | C CAPACITOR | 100pF 50V J | |
| C1626 | NCB31HK-822X | C CAPACITOR | 8200pF 50V K | |
| C1627 | NCB31HK-822X | C CAPACITOR | 8200pF 50V K | |
| C1628 | NCB21CK-224X | C CAPACITOR | 0.22uF 16V K | |
| C1629 | NBP41DM-106X | TA E CAPACITOR | 10uF 20V M | |
| C1630 | NCB21CK-334X | C CAPACITOR | 0.33uF 16V K | |
| C1632 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C1633 | NCB21CK-474X | C CAPACITOR | 0.47uF 16V K | |
| C1641 | NCB21CK-474X | C CAPACITOR | 0.47uF 16V K | |
| C1701 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C1702 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C3501 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C3502 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C3503 | NBE20JM-106X | TA E CAPACITOR | 10uF 6.3V M | |
| C3504 | NCB31CK-473X | C CAPACITOR | 0.047uF 16V K | |
| C3505 | NCB31CK-223X | C CAPACITOR | 0.022uF 16V K | |
| C3506 | NCB21AK-105X | C CAPACITOR | 1uF 10V K | |
| C3507 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C3508 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C3509 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C3510 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C3511 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C3512 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C3513 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C3514 | NCB31CK-473X | C CAPACITOR | 0.047uF 16V K | |
| C3515 | NCB31CK-473X | C CAPACITOR | 0.047uF 16V K | |
| C3516 | NCB31CK-473X | C CAPACITOR | 0.047uF 16V K | |
| C3517 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C3518 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C3519 | NCB31HK-102X | C CAPACITOR | 1000pF 50V K | |
| C3520 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C3521 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C3522 | NCB20JM-475X | C CAPACITOR | 4.7uF 6.3V M | |
| C3523 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C3524 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C3525 | NCB20JM-475X | C CAPACITOR | 4.7uF 6.3V M | |
| C3526 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| C3527 | NDC31HJ-221X | C CAPACITOR | 220pF 50V J | |
| C3528 | NCB31EK-103X | C CAPACITOR | 0.01uF 25V K | |
| R1601 | NRSA63J-681X | MG RESISTOR | 680Ω 1/16W J | |
| R1602 | NRSA63J-124X | MG RESISTOR | 120kΩ 1/16W J | |
| R1603 | NRSA63J-472X | MG RESISTOR | 4.7kΩ 1/16W J | |
| R1604 | NRSA63J-104X | MG RESISTOR | 100kΩ 1/16W J | |
| R1610 | NRSA63J-471X | MG RESISTOR | 470Ω 1/16W J | |
| R1611 | NRSA63J-471X | MG RESISTOR | 470Ω 1/16W J | |
| R1612 | NRSA63J-104X | MG RESISTOR | 100kΩ 1/16W J | |
| R1613 | NRSA63J-102X | MG RESISTOR | 1kΩ 1/16W J | |
| R1614 | NRZ0072-R330X | MG RESISTOR | 0.33Ω 1/4W F | |
| R1616 | NRSA63D-332X | MG RESISTOR | 3.3kΩ 1/16W D | |
| R1617 | NRZ0072-R330X | MG RESISTOR | 0.33Ω 1/4W F | |
| R1620 | NRSA63J-103X | MG RESISTOR | 10kΩ 1/16W J | |
| R1621 | NRSA63J-103X | MG RESISTOR | 10kΩ 1/16W J | |
| R1622 | NRSA63J-103X | MG RESISTOR | 10kΩ 1/16W J | |
| R1624 | NRSA63D-183X | MG RESISTOR | 18kΩ 1/16W D | |
| R1625 | NRSA63D-361X | MG RESISTOR | 360Ω 1/16W D | |
| R1629 | NRSA63J-564X | MG RESISTOR | 560kΩ 1/16W J | |
| R1630 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R1631 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R1635 | NRSA63J-332X | MG RESISTOR | 3.3kΩ 1/16W J | |
| R1636 | NRSA63J-123X | MG RESISTOR | 12kΩ 1/16W J | |
| R1637 | NRSA63J-154X | MG RESISTOR | 150kΩ 1/16W J | |
| R1638 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R1639 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R1640 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R1641 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R1642 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R1648 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R1701 | NRSA63J-823X | MG RESISTOR | 82kΩ 1/16W J | |
| R1702 | NRSA63J-222X | MG RESISTOR | 2.2kΩ 1/16W J | |
| R1703 | NRSA63J-222X | MG RESISTOR | 2.2kΩ 1/16W J | |
| R1704 | NRSA63J-222X | MG RESISTOR | 2.2kΩ 1/16W J | |
| R1705 | NRSA63J-222X | MG RESISTOR | 2.2kΩ 1/16W J | |
| R1706 | NRSA63J-823X | MG RESISTOR | 82kΩ 1/16W J | |
| R1707 | NRSA63J-103X | MG RESISTOR | 10kΩ 1/16W J | |
| R1708 | NRSA63J-124X | MG RESISTOR | 120kΩ 1/16W J | |
| R1709 | NRSA63J-103X | MG RESISTOR | 10kΩ 1/16W J | |
| R1710 | NRSA63J-124X | MG RESISTOR | 120kΩ 1/16W J | |
| R1711 | NRSA63J-102X | MG RESISTOR | 1kΩ 1/16W J | |
| R1712 | NRSA63J-102X | MG RESISTOR | 1kΩ 1/16W J | |
| R3501 | NRSA63J-471X | MG RESISTOR | 470Ω 1/16W J | |
| R3502 | NRSA63J-104X | MG RESISTOR | 100kΩ 1/16W J | |
| R3503 | NRSA63J-102X | MG RESISTOR | 1kΩ 1/16W J | |
| R3504 | NRSA63D-241X | MG RESISTOR | 240Ω 1/16W D | |
| R3505 | NRSA63D-241X | MG RESISTOR | 240Ω 1/16W D | |
| R3506 | NRSA63D-241X | MG RESISTOR | 240Ω 1/16W D | |
| R3507 | NRSA63D-241X | MG RESISTOR | 240Ω 1/16W D | |
| R3508 | NRSA63J-223X | MG RESISTOR | 22kΩ 1/16W J | |
| R3511 | NRSA63J-101X | MG RESISTOR | 100Ω 1/16W J | |
| L3501 | NQR0006-001X | FERRITE BEADS | | |
| L3502 | NQL402M-100X | COIL | 10uH M | |
| L3503 | NQR0006-001X | FERRITE BEADS | | |
| L3504 | NQR0006-001X | FERRITE BEADS | | |
| L3505 | NQR0006-001X | FERRITE BEADS | | |
| CN401 | QGF0528F1-40X | CONNECTOR | FFC/FPC (1-40) | |
| CN402 | QGF0517F1-08X | CONNECTOR | FFC/FPC (1-8) | |
| CN403 | QGF0505F2-06X | CONNECTOR | FFC/FPC (1-6) | |
| CN404 | QGF0507F3-11X | CONNECTOR | FFC/FPC (1-11) | |
| CN405 | QGF0507F3-18X | CONNECTOR | FFC/FPC (1-18) | |
| CN406 | QGF0503F4-16X | CONNECTOR | FFC/FPC (1-16) | |
| CN407 | QGF0508F1-06X | CONNECTOR | FFC/FPC (1-6) | |
| CN408 | QGF0528F1-40X | CONNECTOR | FFC/FPC (1-40) | |
| ⚠ F1601 | NMFZ007-R20X-K | FUSE | 0.2A 50V | |
| ⚠ F1602 | NMFZ007-R50X-K | FUSE | 0.5A 50V | |
| OT1 | LY33021-001A | S.COVER(P/R) | | |

## JACK BOARD ASSEMBLY <06>

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| PW1 | YB20943B-01 | JACK BOARD ASSY | | |
| IC501 | BA10358F-XE | IC | | |
| IC502 | RPM7138-V4 | IR DETECT UNIT | | |
| Q501 | RPM-22PB | PHOTO TRANSISTOR | | |
| D501 | SML-010LT-X | LED | | |
| D503 | MA8068-X | Z DIODE | | |
| D506 | MA8068-X | Z DIODE | | |
| D507 | EMZ6.8N-X | Z DIODE | | |
| C501 | NBE21AM-335X | TA E CAPACITOR | 3.3uF 10V M | |
| C502 | NCF31CZ-104X | C CAPACITOR | 0.1uF 16V Z | |
| C503 | NCB31EK-153X | C CAPACITOR | 0.015uF 25V K | |
| C504 | NCB31EK-153X | C CAPACITOR | 0.015uF 25V K | |
| C506 | NBE21AM-106X | TA E CAPACITOR | 10uF 10V M | |
| C509 | NBE20JM-226X | TA E CAPACITOR | 22uF 6.3V M | |
| C512 | NCB31HK-103X | C CAPACITOR | 0.01uF 50V K | |
| C513 | NCB31HK-103X | C CAPACITOR | 0.01uF 50V K | |
| R501 | NRSA63J-103X | MG RESISTOR | 10kΩ 1/16W J | |
| R502 | NRSA63J-684X | MG RESISTOR | 680kΩ 1/16W J | |
| R503 | NRSA63J-182X | MG RESISTOR | 1.8kΩ 1/16W J | |
| R504 | NRSA63J-222X | MG RESISTOR | 2.2kΩ 1/16W J | |
| R505 | NRSA63J-103X | MG RESISTOR | 10kΩ 1/16W J | |
| R506 | NRSA63J-824X | MG RESISTOR | 820kΩ 1/16W J | |
| R507 | NRSA63J-104X | MG RESISTOR | 100kΩ 1/16W J | |
| R508 | NRSA63J-683X | MG RESISTOR | 68kΩ 1/16W J | |
| R509 | NRSA63J-822X | MG RESISTOR | 8.2kΩ 1/16W J | |
| R510 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R511 | NRSA63J-302X | MG RESISTOR | 3kΩ 1/16W J | |
| R512 | NRSA63J-470X | MG RESISTOR | 47Ω 1/16W J | |

| MODEL | MARK | MODEL | MARK |
|---|---|---|---|
| GR-D70EK | A | GR-D70EY | C |
| GR-D70EX | B | GR-D70EZ | D |

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| R513 | NRSA63J-101X | MG RESISTOR | 100Ω 1/16W J | |
| R514 | NRSA63J-101X | MG RESISTOR | 100Ω 1/16W J | |
| R515 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R516 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R517 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R518 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R519 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R520 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R521 | NRSA63J-0R0X | MG RESISTOR | 0Ω 1/16W J | |
| R522 | NRSA63J-221X | MG RESISTOR | 220Ω 1/16W J | |
| R523 | NRSA63J-331X | MG RESISTOR | 330Ω 1/16W J | |
| L501 | NQR0251-004X | FERRITE BEADS | | |
| L502 | NQR0251-004X | FERRITE BEADS | | |
| L503 | NQR0251-004X | FERRITE BEADS | | |
| CN501 | QGF0503C1-22X | CONNECTOR | FFC/FPC (1-22) | |
| J501 | QNS0078-001 | 3.5 JACK | | |
| J502 | QND0004-001 | S JACK | | |
| J503 | PEMC1203 | MINI JACK | | |
| SW501 | NSW0122-001X | DETECT SWITCH EJECT SW | | |

## B/W-VF BOARD ASSEMBLY <07>

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| PW1 | YB20940A | B/W-VF BOARD ASSY | | |
| Q7001 | PUMX1-W | PAIR TRANSISTOR | | |
| Q7001 or | BC847S-X | PAIR TRANSISTOR | | |
| D7001 | E1S35AW0C501-X | LED | | |
| C7001 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C7002 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C7003 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| C7004 | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K | |
| R7001 | NRSA63J-332X | MG RESISTOR | 3.3kΩ 1/16W J | |
| R7002 | NRSA63J-561X | MG RESISTOR | 560Ω 1/16W J | |
| R7003 | NRSA63J-470X | MG RESISTOR | 47Ω 1/16W J | |
| R7004 | NRSA63J-102X | MG RESISTOR | 1kΩ 1/16W J | |
| CN7001 | QGF0532F1-18X | CONNECTOR | FFC/FPC (1-18) | |
| CN7002 | QGF0507F3-20X | CONNECTOR | FFC/FPC (1-20) | |